







HARPER'S PICTORIAL LIBRARY OF THE WORLD WAR

In Twelve Volumes
Profusely Illustrated

VOLUME XI

CHILD'S BOOK OF THE WAR

Its History and Wonders Told For Young People



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In Twelve Volumes Profusely Illustrated

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President Emeritus, Harvard University

VOLUME XI

Child's Book of the War

Its History and Wonders Told for Young People

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HARPER & BROTHERS PUBLISHERS NEW YORK AND LONDON

Established 1817



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INTRODUCTION

By Henry Noble MacCracken

President of Vassar College

Girls of France,

May we, who long have listened from afar
And seen the spirit which in you supplants
All your old joy of youth, and watched the star
Of your young hopes fade out—and leave you strong,
In sudden desolation unafraid,
May we too share the spirit of your Maid
Whose courage rings through centuries of song,
And hold her blazoned pathway unbetrayed.

THUS ran a greeting of America to the girls of France, when the United States entered the war. It was written by an American college girl and carried by one of our State Commissioners of Schools throughout the length and breadth of fair but troubled France. Do you not think that they express the feelings you had, boys and girls, when two and a half years ago you saw the great head-lines in the newspapers and knew that America had cast the fateful die which was to change the fate of the world? All that you have sought to do in these wonderful months between has been to share the best and finest spirit of those who have given their all in this cause—we hoped that our part in the conflict, though assumed late in the day, might in quality be nothing lower than the ideals of our Allies.

The Spirit of the Maid! You of the citizenry of youth know better than any of us how much of the spirit that flung America into the trenches was a religious and an inspiring spirit. Your school-teachers linked up this great World War with those other wonderful and romantic wars of the dark ages—the Crusades—but they told you that while the purpose of the crusades was, after all, but a beautiful gesture symbolizing the freedom of Christian Europe from the tyranny of the Moslem invader, the crusade of to-day was an all-embracing task which should not only symbolize the idea of Democracy against Autocracy, but should accomplish for them, if our will could hold, that freedom which is the life-giving atmosphere of popular government. Thus, day by day as you studied in your classes the world history, and the great book of the war turned over its daily page, you came to understand what the spirit of a nation might be under a leader who had made the moral issue the vital one, and who had striven to unite all hearts beneath the country's flag before that flag should be sent forward in the way of battle.

The Maid of France had not only the spirit of religion and of inspira-

tion in her leadership, however, but in defending the honor of her country and in restoring it free from a foreign invader she placed herself in line with what you have learned as the inevitable development of peoples, the national ideal. Thus her work did not die with her at the stake in that crowded market-place of Rouen. The very winds of France drew from that funeral pile a message that thrilled her people from one end of the land to the other, until, twenty years after, the Hundred Years' War was ended and France was free of the foreigner. The national idea which so inflamed the imagination of those who followed the Maid into the fray lived on and increased, and while selfish kings and conflicting religions and parties hurt and debased that national ideal, the Spirit of the Maid was always there to ennoble and to beautify it, so that it has never died. The French children are fond of singing the song, which ends with these lines:

Et comme aux temps où dans l'humble prairie Mes voix du ciel venaient armer mon bras, J'entends encore une voix qui me crie Tu puis mourir, la France ne meurt pas.

which, in spirit, mean in English words:

And as of yore, when in Domrémy field,
My voices called, "There shall your pathway lie!"
The Voice bids now my spirit not to yield;
I pass away, but France shall never die.

This ideal of the national glory has been held more truly and finely, perhaps, in France than in any other land. It is this that has made the poilu the marvel of this war—a fighting soldier without an equal. It is this which, following one disaster after another, has, like the old fable in the Greek story-book, cast France down to earth, to spring up with tenfold strength from each defeat. And it is the dream of every noble heart in France that that country which the Maid typifies and which has been saved to-day by the courage of her sons and daughters, and the aid of her friends across the Channel and the sea, shall in the days to come be all that the Maid could wish for in nobility and dignity and beauty and wealth. The national ideal is a great ideal, but only great if it is held true to the eternal values of things. Some men and women to-day would reject it and throw it away, because so much of selfishness and pride and cruelty has been associated with the development of the nations of the world. But few of us wish to follow them in this suggestion, because they cannot suggest to us anything to put in its place. It seems to most of us—admitting the folly and the falsehood and the cruel force that national honor has hitherto signified—that these are not real parts of nationalism, but have been there because they have been in the hearts and wills of the men who have guided national destinies. Our task is to put as the rulers of the people men and women who have more wisdom and more moral courage, to substitute for the old ideals of national development, a way of living by which the nations shall be expected to behave themselves and

be as honorable, generous, and just as we now expect any boy or girl to be. This remedy, and this alone, is what the nations need to-day. To change the external forms of government without first changing their hearts is not to have a better world, but to provoke new wars. We want the Spirit of the Maid.

The war has come and gone; and the boys and girls of America can be proud that there is no stain upon their flag, that the United States has been true to the declaration of purpose which her President made when relations with the Central Powers were broken off.

America, the mighty stripling, the youthful knight among the nations, has kept its honor pure and has followed the flame as the poet bade.

O young Mariner,
Down to the haven,
Call your companions,
Launch your vessel,
And crowd your canvas,
And, ere it vanishes
Over the margin,
After it, follow it,
Follow The Gleam.

We shall be glad always that through the conflict we never altered our course or changed our purpose or faltered in any way in the one mighty resolve—which we had made. We counted not the cost. The nation moved forward as one under its banner. The soldiers studied the difficult lessons of war and learned them well and used them valorously. The sailors drove their frail destroyers through the overwhelming waves of the mid-Atlantic, for which their boats were never built, to guard the convoys against the greater peril from under the waves. The workmen in the factories hammered rivets with tireless arms; the farmers delved and the women span; and the whole land was filled with labor which marched all one way.

So we learned again the lesson of union, a lesson some of us had begun to forget. We learned that the labors of many for one cause are multiplied, not in proportion to the number of hands that give themselves to the work, but that from somewhere—from God, shall we say?—there is given an increase of power which is out of all proportion to united strength. We have all decided that this miracle which came to pass in our day in 1918 shall not be forgotten, and that it shall be an example telling us how the difficulties of to-morrow may be met and overcome.

It is good for you to know, boys and girls of America, that you have been a part of this great miracle. It will remain with you to tell your own children of in days to come. You must keep its memory green within your hearts. You must not let business and care stain and cover and conceal the wonder and the glory of this day. Hold it fast, because you were a part of it and gave yourselves to its accomplishment, and so helped America, the true America, to live again.

When the bugles of war blew, the boys and girls heard them. At first you just marched with the band alongside of the soldiers in the city

streets, but this did not content you long. In every town and every village you asked your fathers and mothers, you pestered your teachers, to know what you could do to help to win the war. At first it was not easy to answer your questions. Children's eyes and hands and feet have not been thought of before as implements of warfare. The hearts of fathers and mothers have revolted against the thought that children's lives should be embittered by war and their hearts made stern and hard while they were still children. But this was a war different from all others. You knew, because you had read the papers, and because your fathers had told you how the children in Belgium and France and Russia were all a part of the war, and suffered all the famine and the torture and the death that came to their countries. Whatever was the price of war, the children paid in full with their fathers and mothers, and what the children of France and Belgium and Russia and Italy had done, you could not be withheld from doing. You felt yourselves to be citizens; and you demanded a share of the common task. America was not to suffer as had those lands, but she was to share in other costs, and of this you must bear your part. And so, while men and women all over the nation did their best to see that the younger children received no hurt from the war conditions prevailing, the older children asked and received their commissions as officers and soldiers of Uncle Sam. The school year did not end in 1917 before, in many cities, classes in domestic science were sewing and knitting hospital supplies and comfort articles for the soldiers' kits. During the summer months that year boys and girls helped to collect books for the army posts. They ran errands in their Red Cross headquarters, and when, in the fall, the second Liberty Loan was subscribed, the children were mobilized through their schools and secured millions upon millions of dollars in subscriptions. On September 1, 1917, the President issued his nowfamous program to the school-children, asking them to join the Junior Red Cross. Before the 1st of March following, more than eight million children had joined this organization. The work of the Junior Red Cross soon assumed such proportions that through most of the land it became the one great agency for which the service of boys and girls might count for victory. The Red Cross school organization carried on the campaigns for the War Saving Stamps, the Liberty Loans, and the Food Conservation, as well as production of Red Cross supplies. Of this latter, official figures issued by the American Red Cross Headquarters, Washington, show that during the war the children of the Junior Red Cross made in their schools supplies for the Red Cross and for the army exceeding in money value ten million one hundred and fifty thousand dollars, or more than 11 per cent. of the total production of the entire American Red Cross in the war. The articles thus made by the children for Uncle Sam included everything that their mothers wove or knitted or folded or cut, and in addition many things which their mothers could not make, but which they could make in their school shops. The boys made the cuttingtables on which the surgical dressings were cut out. They made cabinets in which the supplies were kept, the medical chests which the army medical officers used, splints and crutches and supports for broken limbs, articles of every kind for sale in Red Cross bazaars, chairs and benches and tables and other furniture for the Red Cross convalescent houses in camps, and for the nurses' homes adjoining them. Everywhere that a need could be found which children's hands could satisfy, the children in the Junior Red Cross set out to follow the order. They saved and earned in addition millions of dollars to buy the supplies and to help the children of the Allies. This work they have kept up since the armistice, and their program of peace includes the maintenance of some international agency by which children can help children in the tasks of reconstruction in the

coming days. Boy Scouts and Camp Fire Girls, Girl Scouts, and many other organizations of children, did wonderful service for their country under other leaders, but by far the greatest effort was carried on by the children under their school-teachers, to whom a great debt of gratitude is owed for their unselfish service. I will give but one example. Sixty-five thousand school-children in Porto Rico had made wonderful supplies of surgical dressings and other hospital needs at one time, when the ship that was carrying these goods to the front was torpedoed by a German submarine, and everything was lost. The children of the whole island felt very badly that their work should thus go for nothing. Then the school-teachers in the island met together, and all agreed to give a part of every teacher's small salary to buy the cloth for new supplies, and the work was all done This act of sacrifice on the part of the teachers of Porto Rico is only one of many stories that could be told. Is it any wonder that under their leadership these new nieces and nephews of Uncle Sam made five thousand garments for sufferers abroad, and fifteen hundred garments for their own sufferers from earthquake shocks, last year, endowed a room in a large French hospital, bought and shipped three ambulances, and in addition subscribed eight thousand dollars for the National Children's Fund of the Red Cross? And what Porto Rico did the United States did in large measure. Ambulances were paid for, equipped, and maintained by children, millions of dollars were subscribed to the great war agencies, such as the Community Service of the War Camps, the Y. M. C. A., the Knights of Columbus, and the Y. W. C. A. Under the last organization thousands and thousands of the older girls helped to make conditions near the training camps in America pleasant and helpful and good for the soldiers. Clubs of children earned the money to adopt orphans, and proudly assumed the duties of fathers and mothers. One little Japanese school-boy in a California school wrote to his new cousin across the sea the following letter:

Dear Little Brother,—We are very glad to have new little French brother. You have a about 45 elders brother in Garneld School, Berkeley, California, in U.S.

This State is the best State in U. S. and Berkeley best city in State. Garfield School is best school in city. So you know where and what kind school your brother attending to school. We are going to adopt you until two years these words will never break by ourselves.

Now young brother let us tell you how adoption begun. When the teach told about adoption of another class we choose the President and Vice Presiden which please among us quicly as possible. Those boys will keep account of these. Have you a brother or sister? How many? How are your looks like? Describe yourself and tell

to us. By and by we will send money for your picture and your mother. We are very glad to do this, because it is part of our bit, and when an opportunity comes we may see you.

Now we must close the letter. Please write to us when your mother have time. Take good care of yourself.

Your Friend,

Kaiji Uchikura.

Some of the things the children did to win the war were unusual, and amusing. The children in a county in Wyoming picked the wool from the bushes on their sheep-ranches, and brought in more than five hundred pounds to their Chapters, to be made up into sweaters. The children in California killed gophers to make the land more productive for Uncle Sam's soldiers. In the mountains of Virginia they carried the messages and the supplies for the Red Cross chapters and auxiliaries. When the influenza struck the Southern camps, the children made pneumonia jackets, etc., to keep the soldiers warm.

Not only in this land did American children's influence extend, but wherever American children lived in cities throughout the world, they helped to organize themselves with other children to work for the soldiers. Thousands of Chinese children joined the Junior Red Cross to make supplies. The children of Archangel, in Russia, organized themselves to make comforts for the soldiers up in the Arctic tundra. And as their busy arms and hands were directed in the tasks of mercy and relief, the harmful effects of war conditions did not reach them, as they might have In every country affected by war the crimes committed by children always increase, but in America this was not so serious as it might have been, and the fact that children could help as real soldiers and useful citizens kept them from many things that the excitement of war-times might have suggested. It is a wonderful story how the children won the war, but it cannot be told as early as this. It will make some good pages, however, in the school history to be written to-morrow; and you, boys and girls of to-day, will never regret the days of service you gave when the Yankee arms went overseas.

A war is not a very good way of settling quarrels. It costs too much; and it never really settles anything. Even this great war, which many people have hoped would settle everything, has not settled many things; and the things that have been settled have been settled more by the will of peoples expressed through laws and treaties than by war. One great thing that was settled is just what has been said—that war does not settle things, and that it costs too much.

Some men tried to tell us before this war began that wars were so expensive that no one would ever start one, and that if he did his country would be ruined before it was over. But such people underestimated the wonderful power of resistance and endurance which the people of a country have. We all of us thought during the war that Serbia could never survive, and yet she is far from death as a nation. These people were right, however, when they told us that war cost too much, and we all know this now. We are sure, too, that any future war will cost much more than

this war did, and so we are anxious not to have wars in future. To avoid them we must find some other way of settling quarrels, and it is for this reason that we have tried to set up a League of Nations which in peaceful ways and by getting together will try to find a way out of every quarrel, without bloodshed.

We know, of course, that people have not changed very much from the days when wars seemed necessary. Men and women are still full of the same thoughts and reasons which led them to have quarrels with one another. That wars will come sometimes we shall have to expect, because men and women are what they are. But just as accidents can be lessened by "Safety First," because men and women are reminded of the necessity of taking care of themselves, so we hope that by having an international court to discuss quarrels, and an assembly where representatives of different countries will talk with one another in business and other ways, we can reduce the frequency of international accidents like war. The idea is something like what has happened in children's games. Formerly, as everybody knows, football was exceedingly dangerous, and many boys were killed on football-fields. Now the rules of the game are made more strict and the umpire has more authority. The injuries are reduced, but the game is just as exciting as it used to be. In the same way many children were killed on the Fourth of July by their own carelessness; but now in many cases the fireworks have been taken out of their hands and they are not liable to the same risks. By these two means, the removal of the dangerous weapon which we call armament, and the playing of games of life under stricter rules which will be provided by international courts of law, we hope to make war less terrible than it has been in the past. Perhaps men and women will let a little child lead them, in suggesting that there is just as much fun in games as in the real activity which the game imitates. International competitions of many kinds can be suggested as substitutes, in which the warlike feelings can be worn off by exercise. You have all been told how the American general in the Philippines got the head-hunting Bontocs and Igorrotes to stop chopping off one another's heads in their tribal wars. He did this by the simple means of getting them to play baseball. Every time a Bontoc knocks the baseball out in the field, he gets the same pleasure that he used to get when he sent a head of an enemy flying. So boys' games may be the example that will lead men back to peace.



Child's Book of the War

I. WHY THE WAR CAME AND HOW IT WAS FOUGHT

CAUSES OF THE WAR

The Age-old Struggle Between Democracy and Autocracy Which Was at the Root of the War

THERE are two kinds of nations in the world: those which believe that governments derive their powers from the consent of the governed, and those which believe that kings receive their power from God and that they may use it over people who have nothing to say about its use.

The first is a democracy; the other is an autocracy. The war of the nations which is just ended was one of democracy against autocracy, and that really means that it was a war of the free people of the world against masters and their bondsmen.

At one time all the great nations of the world had kings. Strong men were able to seize the leadership of a country and to hold it and pass it on to their sons, so that the people came to accept one family as rulers.

The people themselves were oppressed. They paid heavy taxes to the rulers and enjoyed little or no benefit from them. Naturally they began to grow dissatisfied. In some countries—England, for example—leaders sprang up

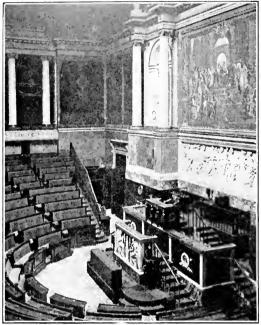
among the people and bit by bit the rulers lost their power. As early as 1215 King John of England signed the Magna Charta which transferred power from king to people.

THE DEVELOPMENT OF DEMOCRATIC GOVERNMENT

Years went on. The idea of free government had taken root in the minds of people, but it never really bore fruit until the last part of the eighteenth century. Then in 1776, in Independence Hall the thirteen American colonies of Great Britain revolted against the imposition of a tax which the colonists considered unjust; they went to war, and were victorious.

They went to war because their principles of freedom and justice were at issue, and when they had established these principles and created the United States of America they made a free republic based on the doctrine that power comes from the people and that government exists merely to administer

that power. So you see that in a way, when the United States went into the European War of 1914-18, it was fol-



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The Chamber of Deputies
Where the lawmakers of France meet.

lowing the example of its fathers, the sturdy colonists.

CONTAGIOUS DEMOCRACY

After the American democracy came into being, other nations of Europe were inspired toward the ideal of government in which the people should have a voice.

Although Great Britain is nominally ruled by a king, it is to-day one of the most democratic governments in the world. The King of Italy holds his power as the result of a war in which the Italian people won their freedom from Austrian rule. Even Russia would no doubt ultimately have reached a more liberal form of government, since the people were constantly revolting against

the autocratic rule of the Czar and the grand dukes.

In contrast to these countries the people of Germany and Austria accepted the idea that their rulers derived their authority from some divine source. It is hard for us to realize how little voice in the government the German people had.

THE GOVERNMENT OF GERMANY

The country was governed by the Emperor. The Bundesrath and the Reichstag made the laws.

Now the United States also puts its legislative power into two Houses, the Senate and the House of Representa-



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Westminster Abbey

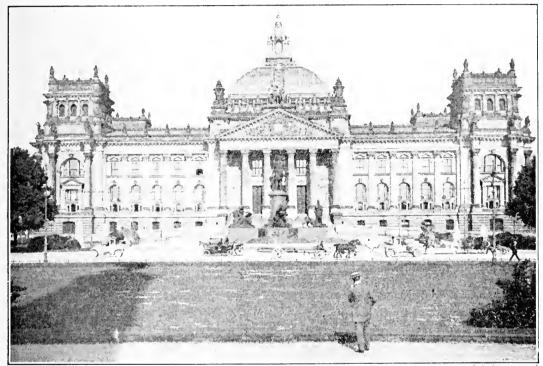
With Houses of Parliament, House of Commons and House of Lords, in the foreground.

tives. France delegates power to the Chamber of Deputies, and England to the House of Commons and the House

of Lords. But England restricts the power of the Lords, and in this country the Senate and the Representatives are elected by, and are directly responsible to, the voters. The vote depends on neither wealth nor class.

In Germany, however, the vote does depend upon class, so that in one dis-

cellor, who was appointed by the Kaiser and was responsible only to him. Moreover, the German constitution permits its foreign policy to be determined by the Kaiser alone, and his was the power of declaring war, though he must first get the consent of the Bundesrath, and in case of a war for the defense of



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The Reichstag

The meeting-place of the German legislative bodies.

trict—Cologne, for example—370 rich men have the same voting power as 22,324 poor men. In the Bundesrath, or diplomatic body, are represented the different kingdoms of the German Empire: Saxony, Bavaria, and so on. The ruler of Prussia, the Kaiser, dominated the assembly and became through it the absolute ruler of the Empire.

The Reichstag could not control the Kaiser in any way. It could not put ministers in office or remove them from office. It did not even name the Chan-

Germany he did not even have to do this. We could not have a better example of the difference between autocracy and democracy than the fact that the Kaiser had thrust his country into war three days before the Reichstag, or limited popular assembly, knew officially of its existence, while the President of the United States had to summon Congress into a special session for the consideration of the war problem. So you see that in spite of what seemed like a constitutional government Germann and the seemed of the constitutional government Germann and the seemed of the constitutional government Germann and the constitution and the cons

many was a thoroughgoing autocracy with the Kaiser as the supreme autocrat of Europe.

THE UNFORGETABLE AUGUST, 1914

The story of the first weeks of the war is one which the world will never forget. Peaceful villages were turned into smoking ruins, and families became refugees fleeing from the gray terror of the oncoming German hordes.

In everything the Germans did were the marks of careful planning and deliberation. Germany wanted war. Why? In the first place, she had come late into the family of nations and the best regions for colonization and exploitation in the temperate zones were occupied by other powers. She needed territory, and then more territory; she wanted what the Kaiser called "a place in the sun." But Germany had other reasons for wishing war. She knew that a successful war meant large indemnities from the conquered territories; she believed the teachings of her philosophers and statesmen that war was necessary to weed out the weak and establish the rule of the strong; she wished to impose her civilization, or Kultur, upon all the world; in short, she was determined to become the dominating nation of the world.

We are all familiar with the words "Pan-Germanism" and "The Middle-

Europe" project.

They belong entirely to Germany. They tell the story of Germany's ambition. "Pan-Germanism": her belief in the superiority of the German race, and her determination to promote the Germanization of the world.

"Middle-Europe project": a federation of states—Austria-Hungary, the Balkans, Turkey, Rumania, Greece, Denmark and Sweden, Holland, all of central Europe; this vast territory to be under the control of Germany. In

preparation of this plan of a Middle European Empire Germany had secured a concession to build the Berlin-to-Bagdad Railway—which was to run from Berlin, through Austria, through Constantinople, to Bagdad and the Persian Gulf. It was a huge scheme; when the war came a large part of it had been completed.

Serbia, one of the little Balkan states, lay in the way. Germany or Austria must control Serbia and Bulgaria, through whose territory the Berlin-to-Bagdad Railway had to run. Bulgaria and Serbia were at swords' points. Bulgaria had made a secret treaty with Germany which promised that she should have large grants of territory in case of a successful war.

This territory had to come out of Serbia. Serbia knew it and naturally was not disposed to be under the domineering control of either Germany or Austria.

So an excuse for putting Serbia out of the way had to be found. It came when the Archduke Francis Ferdinand, heir to the Austrian throne, was assassinated by a Serbian student while he was visiting Sarajevo, in Bosnia.

Together Germany and Austria decided that this was "The Day" for which they had waited to begin their conquest. Austria made intolerable demands upon Serbia. They were demands that no brave and self-respecting nation could grant. Germany's hand was cleverly played. The events of August, 1914, moved swiftly.

Russia, Serbia's ally, intervened. Germany announced that if Russia took sides with Serbia against Austria

she must face Germany, too.

And so it went. France, Russia's ally, stood ready to aid her. Germany invaded Belgium, a neutral country, in order to get at France. Belgium resisted, and as a result German troops began to devastate the country with



National Army Men Build Kaiser

Our boys were always ready for a frolic when they were off duty. These husky doughboys have just finished making a snow image of the German Emperor—mustaches and all.

fire and sword, thus committing a crime which aroused all civilized nations and will be hard to blot out of memory.



Marquis de Lafayette The earliest friend of America

England then entered the conflict, and the greatest war of history was on.

England, France, and Russia were known as the "Entente Powers," while Germany, Austria, and Italy formed the "Triple Alliance."

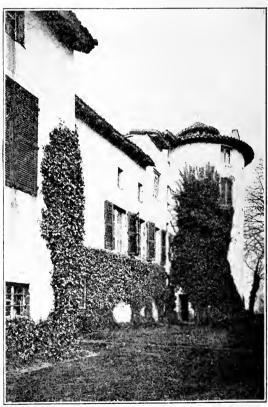
In spite of her treaty arrangement with Germany and Austria, Italy refused to enter the war on their side, since she maintained that the Triple Alliance was for defense only and that Germany and Austria had not been attacked.

"LAFAYETTE-WE ARE HERE"

Month after month the aggressions of Germany caused new nations to break with her: China, Japan, and finally, on April 6, 1917, the United

States, after a long period of endurance and insults, intrigues, attacks on her commerce, and defiance of international law, severed diplomatic relations with her, and a state of war was declared.

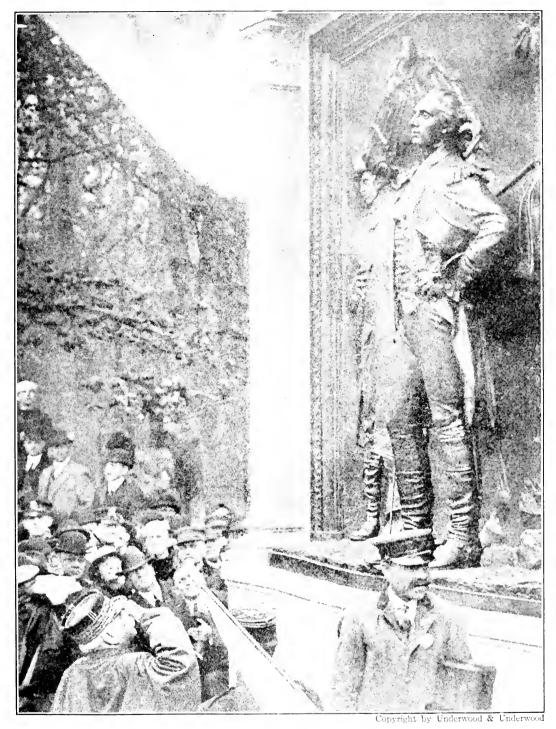
The spirit of the Pilgrims and of the men of '76 was in arms. The American people felt that the principles of liberty as laid down in the Declaration of Independence were in danger. They saw, too, that if the autocratic principles of the Kaiser were allowed to dominate Europe it would only be a matter of time until they dominated America as well.



The Château of Chavaniac

The birthplace of Lafayette, former loyal friend of the United States.

And so the people of the United States entered the war, to preserve not only the rights of free peoples in



Field-Marshal Joffre in Brooklyn at the Unveiling of Lafayette's Statue

The "Hero of the Marne" visited this country shortly before the United States joined the Allies. Here he is saluting the statue of one of the truest friends we ever had.

Europe, but to protect themselves from being enslaved when their time came.

When President Wilson read his memorable message to Congress telling it that the war was inevitable, he said: "The world must be made safe for democracy. . . . We have no selfish ends to serve. We desire no conquest, no dominion. We seek no indemnities for ourselves, no material compensation for the sacrifice we shall freely make. We are but one of the champions of the

rights of mankind. We shall be satisfied when those rights have been made as secure as the faith and the freedom of nations can make them."

Americans of the future cannot but be proud of the motives which brought their country into the war, as well as of the heroism and unselfishness with which men, women, and children, soldiers and civilians gave their energies, their devotion, and their lives to the cause of freedom.

LAFAYETTE

By RICHARD A. PURDY

LAFAYETTE; at our cry from the cradle you came
And beside that of Washington listed your name.
You had come at the call of the Colonies' stand,
You had come in your youth with your sword in your hand.
When you went you had seen Freedom's banner unfold
In the new western world by the help of the old.
You returned in your age on a visit, to greet
All the sons of the fathers who knelt at your feet,
While the rising Republic, proclaiming its debt,
Hailed the friend of America—brave Lafayette.
Yet the homage we gave was the only reward
To the country that lent us the strength of your sword.

THEN a century's silence enveloped your tomb,
When the France that you loved, overwhelmed and in gloom,
Saw the shadow of rape, the eclipse of her sun,
In the oncoming hideous hordes of the Hun—
Like a gray tidal wave that engulfs and destroys!
Like an earthquake that shatters with thunderous noise!
But the ocean was open, we steered for your shores
Through the lines of sea-monsters with outstretching claws—
Not a handful, but millions, to join the advance
And to serve by the side of the soldiers of France.
Let us hope that your spirit was hovering near
When we said at your tomb—"Lafayette, we are here."

THE WORLD IN ARMS

How the Nations Fought the Battles of Democracy during Four Years of Conflict

THE Germans did not embark on a world-war in August, 1914, without a plan of campaign, so carefully worked out that its success was unquestioned by the German General Staff. In a few words, it was this: crush France first, then turn and crush Russia. To gather the fighting forces of vast Russia, to equip them and transport them to the front, with Russia's imperfect railroad system and general lack of management, was thought to be a matter of weeks. Germany counted on her enemies' slowness of mobilization as against her own preparedness. would hurl the whole force of her army on France, then hurl it against Russia.

Thus the key-note of Germany's plan was speed. That is why she chose to send her main forces into France through Belgium. She thought it would be the quickest and easiest way. France had erected numerous fortifications on her German frontier, for use in case of invasion, but her defenses on her Belgian border were weak, because all the great nations of Europe, including Germany, had solemnly agreed years before that Belgium was never to be invaded. Besides, from the geographical point of view, the Belgian plain was the best gateway into France.

But in this plan Germany either counted out or overlooked certain factors; and it was due to these that her campaign of 1914 failed to conquer France.

First of all, Belgium resisted and held up the march.

Second, the Russians mobilized quicker

than Germany had expected and invaded East Prussia.

Third, England came promptly to France's rescue.

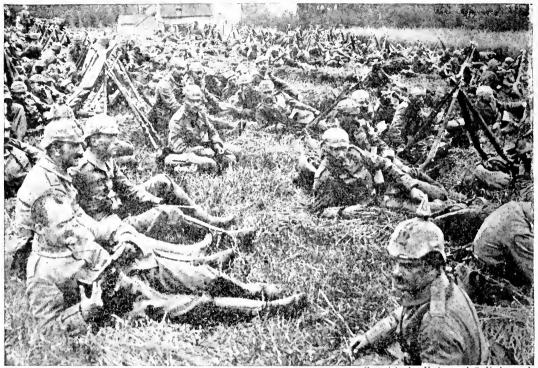
And last of all, though the Germans outnumbered their opponents, the retreat of the English army delayed the Germans' progress, and Joffre's battle of the Marne stopped it.

Let us begin with that fateful day, August 4, 1914, when German troops first crossed the border into Belgium.

Liège! What does that word bring to your mind? Forts? Howitzers? Hosts of Germans pouring through the narrow gate into Belgium? The heroic resistance of a band of Belgians?

It was at Liège that the German army met its first opposition. It took them eleven days to subdue the forts of Liège. These forts had once been reckoned as impregnable by the world; they were built in the most modern fashion of concrete and steel, but the big German siege-guns crumbled these defenses And the German army to pieces. moved on through Belgium, taking Brussels and making short work of the forts of Namur. On and on they went, thousands of them. By the sheer force of numbers they defeated the gallant Belgian army under King Albert; they defeated the British Expeditionary Force and the French, and they went swarming over the border into France, on the road to Paris.

But do not think that this defeat was a capture, or the Allied retreat a rout. No. Systematically, according to plan, they fell back before the invading hordes. Joffre, the commander-inchief of the armies of France, was biding his time. For the steady advance of the Germans meant three things favorable to the Allied cause: the lines of communication of the Germans were being lengthened—that is, all their food and Kluck's army from getting around the flank of the French and British and thus cutting them off and capturing them. And the British army, though they were but a handful compared with the forces that opposed them, carried



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The Kaiser's First-class Fighting-men

German infantry during a temporary halt on their way to France. They look quiet and reposed here, but are just resting for their rolling sweep into France, their destruction of French towns and countrysides, and the entrance into Paris—which did not take place until their envoys went there to sign the peace that was to mean their defeat.

ammunition had to come farther to reach them; then their force was weakened by leaving guards behind them, and, besides, Joffre's reserves were ready outside of Paris.

The retreat of the British Expeditionary Force after the battle of Mons is one of the memorable events of the war. "Contemptible little army" they had been called by the Kaiser; little indeed they were, but contemptible, never. Their orders were to delay the German advance and to prevent General von

out their task, contesting every inch of ground, dying by the hundreds, but not defeated.

While the English were fighting against von Kluck's army, another army of Germans was invading France through the neutral Duchy of Luxemburg, and still another, under the Crown Prince, was making its way by Lorraine and the fortress of Metz into France.

These armies had one direction, one aim, one end—Paris. Nearer and nearer they came; they crossed the river



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Field-Marshal Joffre

"Papa Joffre" his countrymen affectionately called him. He was commander of the French armies which threw back the advancing Germans when they had reached the very gates of Paris early in the fall of 1014.

Aisne, they crossed the Marne, and their guns could be heard in the streets of Paris. The government left Paris for Bordeaux; every one thought the city was doomed.

Then came that great event of the war:

THE BATTLE OF THE MARNE

Some people say the battle of the Marne was a miracle.

"Who turned the Germans back at the Marne?" a French soldier was asked.

"God," was his answer.

Some say that it was the unconquerable spirit of the French, typified in General Joffre's order not to give up another foot of French soil.

Even the historians differ. One lays it to the defeat of the Crown Prince's army near Verdun and Nancy. On account of the stand of the French, he failed to advance; and therefore the general plan was altered and the other armies had to fall back. Another historian says that when General von Kluck swung his army toward the southeast he was ignorant of the numbers of French and English on his flank waiting to fall upon him, and of the chance of an offensive he was giving them. Another man insists that the St.-Gond marsh into which the Germans retreated helped the defeat. Whatever the cause, the facts are these:

On the 6th of September von Kluck turned the direction of his army to the southeast across the defenses of Paris, exposing his flank to attack. General Joffre, having retreated to favorable ground, brought up his reserves—some even being sent from Paris in taxicabs—and for the first time took the offensive. This offensive, which lasted five days and comprised many battles, was what we call the battle of the Marne. It drove the Germans back across the

Marne to the Aisne; it saved Paris; it saved France.

THE DEADLOCK IN 1914

Though the Germans had retreated and for the moment had given up hope of wiping out the French army and capturing Paris, they were not defeated. They intrenched themselves along the bank of the river Aisne. Here began that new kind of warfare called trench warfare. "No Man's Land," to "dig in," going "over the top," "dugouts,"
"pill-boxes," "barrages," "hand grenades," "snipers," "cooties" are all familiar words and phrases to us now, and we forget that in their present meaning they did not exist before 1914. They are all the product of trench warfare. We have seen maps of the zigzag lines of trenches and pictures of trench-marked fields: we know something of the life of the trenches, of the terrible shelling, of the bomb-proof dugouts; we have read stories of machine-gunners, of patrols, of tunneling and mines; and so familiar are we with the language and general idea of the trenches that we do not realize that modern trench warfare began only a few years ago, when the Germans intrenched themselves after the battle of the Marne.

The furious but vain attempts of the French and English to drive the Germans from their trenches in 1914 make up the battle of the Aisne.

In the meanwhile, the battle line was extending itself. The Germans, not being able to capture Paris, made a rush for the Channel ports. "On to Calais" was the slogan. To capture these ports would have been a great feather in their cap and a handicap to the British; it would have interfered with the passage of English soldiers and supplies across the Channel and it also would have served as a place from

which to attack England. But again Germany was defeated in her purpose. Antwerp fell in October, 1914, but the French line held fast below Arras, the Belgians at the river Yser, and the British at Ypres. The bloody battles of Ypres are famous. Though the Germans were superior in numbers, though they sent into battle their supposedly invincible Prussian Guard, they could not break the British line. It held.

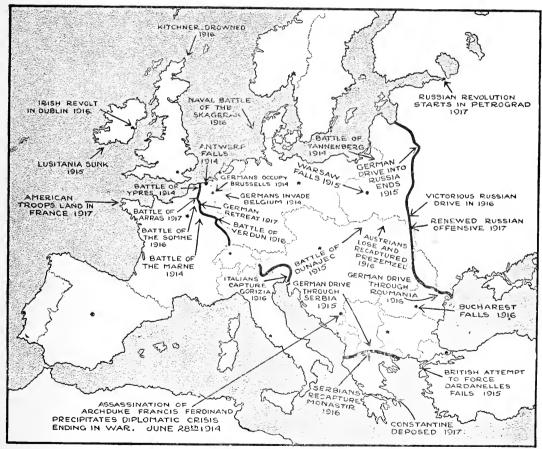
Thus, at the end of 1914 we find the war at a deadlock. Germany, it is true, was in possession of most of Belgium and great bits of France; but she had

not defeated the Allies. For nearly two hundred miles the two lines faced each other—from Switzerland to the sea.

GALLIPOLI-A TRAGIC FAILURE

We have all heard Turkey described as the "Sick Man of Europe." This country, although weak politically, has controlled Constantinople and the Dardanelles; and these two places have been for centuries the source of contention and envy among the nations.

The Germans in their dream of world conquest included the East, and Constantinople is the gateway to the East.



From Leslie's Weekly

Three Years of War

A topographical review of the decisive battles and important events of the European war from 1914 to 1917.

Therefore, long before the war broke out Germany succeeded in getting an influence over the weak Turk, and under her guidance Turkey declared war on the Allies in November, 1914, and closed the Dardanelles to commerce.

Now Russia had three outlets by sea: Archangel up in the north, which is closed early in the fall on account of ice: the Baltic, which was closed by the German fleet; and the Black Sea, through the Bosporus, past Constantinople, the Sea of Marmora, and the Dardanelles. Thus the entrance of Turkey into the war meant that Russia was cut off from her allies; she could not ship them her huge harvest of wheat, neither could they send her the ammunition and guns which she so sorely needed.

Therefore, in 1915 the English and French made an attempt to force open the Dardanelles. Their success would have meant the collapse of Turkey and of Germany's ambitions in the East; the freeing of Russian trade and the settling of the whole troublesome Balkan question by showing Greece, Bulgaria, and Rumania, which still remained neutral, the strength of the Allies.

So, February 19, 1915, a combined French and English fleet began the bombardment of the Dardanelles forts.

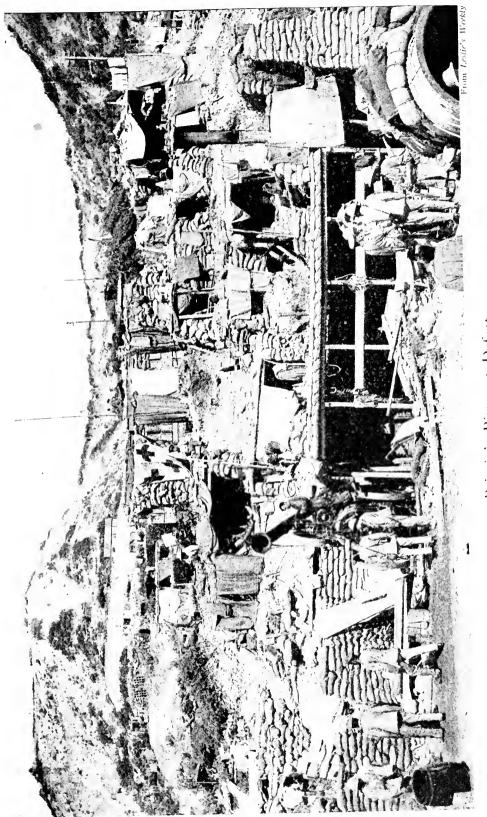
The Dardanelles is a narrow strait forty-five miles long, which leads from the Sea of Marmora to the Ægean Sea. On one side is the coast of Asia; on the other, the peninsula of Gallipoli. Under German supervision both coasts had been fortified with forts and big guns, and the waters of the Dardanelles were strewn with mines.

The Allies first tried to force a passage by naval operations alone. With the guns of their battleships cruisers they bombarded the Turkish forts and some they silenced. But their mine-sweepers were not able to clear away all the floating mines, and

these, swept down by the quick current, caused the loss of three ships. Therefore they gave up the attempt and decided to wait until a land force arrived to cooperate with them.

It has since come out, through the revelations of Ambassador Morgenthau, that the Turks were short of ammunition and were all prepared to open the Dardanelles and give up Constantinople. But of this the French and English knew nothing, so they withdrew. If they had held on a few days longer the course of the war might indeed have been different, and Gallipoli would not stand out as the grave of thousands of gallant men.

On April 25th a force of French and Anzacs (Australian and New Zealand army corps) landed at five different spots on the peninsula of Gallipoli. But the Turks were ready for their They had sent reinforcements coming. to their army, and had strengthened their fortifications. They had made trenches across Gallipoli from which to defend themselves, and had built wire entanglements even below the water's edge. In spite of the fire from the Allied fleet, their machine guns swept the incoming boat-loads of troops. The soldiers had to land under a steady fire; but land they did, these brave Anzacs, and with persistence forced the Turks back. The campaign lasted many months. The Turks retreated gradually; but the advantages were with them. The country was hilly and rocky and gave them every opportunity for defense. They were plucky fighters and the advances of the Allies were costly. Besides, the French and English soldiers were having trouble in getting water. There was none to be had on land, and they could not seem to transport it in sufficient quantities. The soldiers suffered from thirst. So, at last, the ill-fated expedition was given up. The Allies withdrew their



Britain's Bitterest Defeat

This is a scene on the peninsula of Gallipoli, where the Australian and New Zealand army corps, popularly called the Anzaes, fought so bravely. The odds were too strongly against them, and they had to withdraw after suffering terrible losses.

forces and left the Turks undisputed. The Russian advance continued, sweeppossessors of the Dardanelles.

But why did this campaign fail? The general answer to that question is mismanagement. The Allies did not realize thoroughly how hard the task was that lay before them; they were bearding the Turk in his stronghold, and before they landed at Gallipoli they gave him plenty of time to make his stronghold stronger. The Western front, to some of the leading men of France and England, was the all-important battlefield; and in their war plans the Dardanelles had to take a back place.

WHAT WAS HAPPENING IN 1914-15 ON THE RUSSIAN FRONT

Let us recall the German plan of campaign at the beginning of the war: crush France and then turn and crush Russia. We have seen that that plan had failed as far as France was concerned; it also failed with Russia. For, in 1914, while the Germans were advancing upon Paris, the Russians surprised them by mobilizing an army quickly and invading East Prussia. The Germans had to send reinforcements from the Eastern front, and their army, under the now famous General von Hindenburg, defeated the Russians and drove them out of Germany.

However, the other Russian army, under the Grand-Duke Nicholas, which was fighting against Austria and invading Galicia (Austrian Poland), was more successful. Steadily, in the fall of 1914, they drove the Austrians back, inflicting heavy losses, capturing Lemberg, and laid siege to the fortified city of Przemysl. The story of Przemysl reminds one of the sieges of medieval days, when armies encamped around a city and starved it into submission. The Austrians resisted bravely and boldly, but they were finally forced to surrender after a seven months' siege. ing on up to the Carpathian Mountains.

When the Germans first invaded France, and it seemed as if Paris would fall, the Allies clung to the hope, "Wait till the Russian steam-roller gets going." And in the spring of 1915, when the Russians had gained the passes of the Carpathians, it almost seemed as if the dream had come true.

But Germany woke up; or at least she changed her war plans. She had already sent some troops down to aid Austria in stopping the Russian advance, but now she sent an army under the brilliant General von Mackensen, with great quantities of artillery and ammunition. And the great Russian retreat began. Its cause was simple lack of ammunition. Russia was not a great manufacturing country like ours, and she was cut off from her allies, as we have seen in connection with the Dardanelles campaign. Therefore her "guns went hungry." With no defense, the Russian soldiers could not stand up against the intense German gun-fire; they retreated rapidly from the Carpathians. Przemysl fell. Lemberg fell.

A few months before, the Russians had again tried an invasion of East Prussia, but they had been beaten back by General von Hindenburg in the battles of the Masurian Lakes, where von Hindenburg, "the Old Man of the Swamps," as he was called, took advantage of his knowledge of the marshlands to inflict a heavy defeat. after the Germans had driven back the Russians in Galicia, they turned their attention to the north to follow up von Hindenburg's victory, and struck again. Warsaw fell, and other cities and fortresses, and the Germans advanced into Russia.

But, as has often been said, wars are not won by the capture of towns and the conquest of lands; they are won by the surrender of armies. So, though



German Soldiers in Galicia

The Galician campaign was reckoned a brilliant one on the part of the Germans. Note the orderly procession marching down the little street.

the Germans conquered Poland, though they advanced far into Russia, Russia was not totally defeated. The Russian retreat of the Grand-Duke Nicholas has been called "one of the most skilfully conducted retreats of military history." His army was short of ammunition, of guns; it was in danger of being cut through or sorrounded, but he saved it. The Russians retreated to the Pripet marshes in the south and to Dvinsk in the north, and there they held.

The Russian campaign had one very important result. Bulgaria, who had been swinging in the balance, saw the disaster to her powerful neighbor and joined with Germany and Austria. Also, with the Russians out of Galicia, the way was opened up for a new drive into Serbia. This gallant little country, which we connect in our minds with the causes and the opening of the war, made a brave fight for liberty, but against the army of von Mackensen and the Bulgarians the Serbians could do nothing. The Allies, who had an army at Salonika, in Greece, could not come to their aid; and Greece, with its German-influenced king, remained cold to Serbia's cause. So Serbia, like Belgium, went practically out of existence. It was ravaged and pillaged, and its people were beaten and starved. But also like long-suffering Belgium, it found its place in the memories of men.

Russia in retreat; the forcing of the Dardanelles a failure; Bulgaria joining with Germany; Serbia overrun with enemies; the English and French still beating their heads against the German front. Indeed, 1915 was a dark year for the Allies. There was only one ray: Italy entered the war against her old enemy, Austria. Have you ever heard of "Italia Irredenta"? That means the provinces of Italy along the upper part of the Adriatic, which are for the most part inhabited by Italians, but

which have been under Austrian rule. Trieste, Trentino are familiar names to us. To regain these lands, which had once been hers, and which she still called her own, Italy entered the war. Immediately she crossed the Austrian frontier, but her advance was difficult. Of necessity she had to campaign in the mountains. Through her engineers she accomplished some of the most brilliant feats of the war, hauling artillery over mountain-tops and supplies over glaciers. For, besides fighting the Austrians, the Italians were fighting the Alps.

ENTER THE U-BOAT

"The freedom of the seas": how often during the last four years we have heard that phrase. In times of peace, merchant-boats go calmly about their business, carrying their wares on the waters of the four oceans; but when war comes, all is changed.

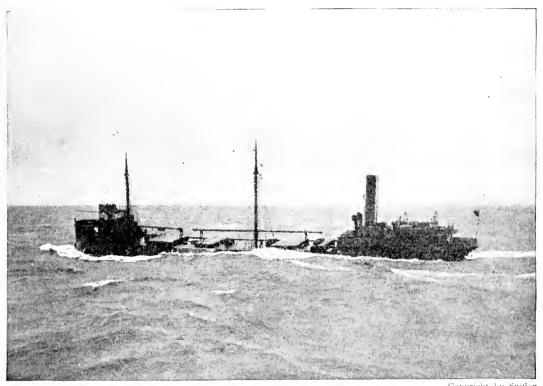
"Britannia rules the waves" is an oft-repeated saving, and quite true it is. The British navy is the biggest and most powerful navy in the world. At the beginning of the war Great Britain put this mighty weapon of hers into use; she blockaded the German coast. In other words, she would not let supplies reach Germany which could be used by Germany for winning the war. Such supplies are called contraband, and this term usually includes materials for making guns and ammunition and such things. But England even went so far as to put foodstuffs on the contraband list. Germany's fleet, except for a few cruisers like the *Emden*, was bottled up in the Baltic, and her ships were lying idle in ports over all the world. The only way for any supplies to reach Germany was through neutral countries like Holland or Denmark, while the seas were free to English trade.

So Germany got out her mighty sea weapon, the submarine. Now, inter-

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national law, of which we have heard so much, had laid down certain rules to preserve the freedom of the seas during war-times for those nations not at war. A vessel of a warring nation has the right to stop any ship and make a search for contraband, and, if it finds Great Britain's blockade: Great Britain was starving Germany, non-combatants and all—and the submarine was merely a method of retaliation.

So Germany declared certain areas around the British Isles a "war zone-" that is—unsafe for any traffic, neutral or



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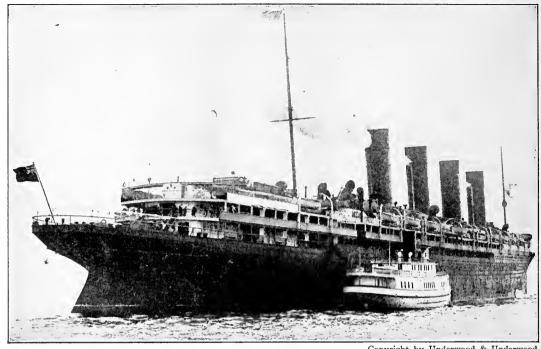
A Submarine Victim

Do you remember the story of the *Monitor* and the *Morrimac*; how the *Monitor*, a little steel boat that could hardly be seen in the water, defeated the much larger Merrimae? In somewhat the same way the tiny submarine became the terror of even the largest ships.

contraband, to take the ship; but if for any reason it cannot bring the capture to port, it should, before sinking the ship, provide for the safety of the crew. To follow these rules was wellnigh impossible for the submarine; so it sank vessels as it could, letting the crews go down with the ships or take their chances in the open boats. Germany defended her submarine warfare on the grounds that she had to fight

otherwise. Against this action the United States immediately protested, for we have always taken the stand that a neutral ship could travel the sea safely, subject to search for contraband; and that a neutral was safe on any ship whatsoever. But our protest was of no avail.

Now it must not be imagined that all the difficulties of neutral trade during the war arose from Germany alone.



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The Lusitania
Leaving New York Harbor on her ill-fated voyage.

Great Britain, being the mistress of the seas, used her authority to her own advantage; and on more than one occasion this government was forced to write to the English government about the treatment of United States ships which we did not think came under the contraband class.

At one time, Secretary Bryan tried to get England to relax her blockade, and at the same time to persuade Germany to make concessions with her submarines. But his attempt was a failure.

In May, 1915, a German submarine sank the *Lusitania*. We all know the details of this terrible tragedy: how the German embassy at Washington issued warnings in newspapers to passengers; how the *Lusitania* was torpedoed without warning, and sank, carrying with her over a thousand people, one hundred of whom were Americans; and how

the Germans celebrated this great victory and defended their action by saying that the Lusitania was armed and carried contraband, both of which statements were disproved. A great wave of indignation swept over this country; again we protested. But Germany would give us no satisfaction. Notes went back and forth; Germany quibbled and gave us empty words, and in the meanwhile sank other neutral ships. But at last, after the Arabic episode in 1915, and again after the Sussex in March, 1916, she gave us pledges to allow American ships passage through the war zone and not to torpedo any liners without warning. These pledges, we shall later see, were but another "scrap of paper."

The submarine warfare was part of the German system of "frightfulness," to terrify the enemy into submission. Along with it went the cruelty in Belgium, the bombardment of the English coast, and the Zeppelin and airplane raids on London and Paris. But in spite of loss of life and tragedies, frightfulness never accomplished its purpose. The Germans did not know the minds of their enemies. The Zeppelins brought recruits to the English army, and the spirit of Belgium, though bound, was not broken.

"THEY SHALL NOT PASS"—THE GREAT BATTLE OF VERDUN

Verdun marked another attempt of the Germans to subdue France. Nineteen hundred and fifteen had been for them a pretty successful year. They had driven back the Russians; they had swallowed up Serbia and Montenegro; they still held fast to Turkey and the

Dardanelles; they had launched their U-boats upon the seas. But though the German people might tell tales of the great victories in the East and the lands they held in France, though they might talk of the control of the East as the important factor in the war, though they might boast of the starvation of England, the facts still remained the same: English ships were still traveling the seas and France was still unconquered. Germany faced the great truth: winning the war meant victory on the Western front. Time weakened her position, while it strengthened her enemy's. Speed, speed, immediate victory was the German cry.

So-Verdun!

Verdun has been called the great fortress of France, the gateway to France. That is partly true. The fall



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"They Shall Not Pass"

Here are some of the heroes of Verdun. They threw back the German hordes in the face of tertific odds, while "all the world wondered."

of Verdun would have been a military tragedy to the French; it would have weakened their line; but whether it would have meant defeat is very doubtful. In any case, its loss would have struck deep into the hearts of the French people; and the spirit of armies, and the spirit of those back home make a definite impression on the course of war, for they go to make up that quality, good morale, which is so necessary to victory.

Verdun is a city surrounded by fortresses. In 1914, when the Germans invaded France, they had counted on its fall, but it had stood stanch against the Crown Prince's army. But in this drive they had pushed below Verdun, making a dent in the French lines and forming the St.-Mihiel salient. A salient is a place where one line has pushed back the other and projects into it. In forming this salient the Germans had cut one of Verdun's railways. The only other railway ran close to the German lines to the north of Verdun, exposed to fire.

To supply a front with ammunition and food and soldiers and reserves requires railways, and these Verdun lacked. That was its great weakness,

and Germany knew it.

But if Germany knew it, so did the French. A single-track, narrowgage railway and the ordinary amount of motor-transports were all right when the Verdun sector was quiet, and Verdun was defended by a comparatively small force. But when the Germans launched their great offensive they could not handle the transportation problem. Therefore, a great system of moter-transports was organized. Roads were built and perfected; soldiers were taken to the front in buses. The road to Verdun was one long, continuous stream of motor-vehicles, rushing to the front, to save Verdun and France. Never, though under heavy shell-fire,

did this stream stop. It has been said that Verdun was saved by motor-trucks.

Verdun had still another weakness: it was defended by the same kind of forts that had proved so powerless against the German siege-guns at Liège and Namur. But, knowing this, the French did not put all their faith in steel and concrete; they had trenchlines; they made counter-attacks.

The battle of Verdun began in February, 1915, and lasted for five months. Starting with the greatest artillery bombardment the world had ever known, the Germans hurled their hordes of soldiers against the ring of fortresses. At first it almost seemed as if they might be victorious. They pushed the French back and captured Fort Douaumont. But the heroic French, under General Pétain, resolved to defend Verdun to the last man. "They shall not pass!" was the ringing refrain, and pass they did not. For months the Germans, reckless of life, threw their troops at Verdun. tried the frontal attack; they tried assaults on the wings. They tried everything. But Verdun stood firm.

Pétain managed the defense wisely. His whole plan was not to hold certain forts or places, but, whether the Germans gained ground or not, to make them lose men. Douaumont, Vaux, against which the Germans hurled eight thousand projectiles a day, Dead Man's Hill—these names are monuments to the slaughter and fury of the many battles which made the battle of Verdun. The Germans kept up the assault long after it seemed hopeless. Verdun became "a trap where Germany was bleeding to death." At last, worn out, they gave up the attempt; and later, Pétain directed a brilliant counter-offensive which retook all the lost land.

Again the Germans had failed, and this failure had cost them half a million men.



Church of Notre Dame at Albert (Battle of the Somme)

Sometimes victory costs so much for those who win that they might even begin to doubt if it were worth it all, if they did not remember the great cause for which they have been fighting. Just imagine what the poor people thought when they saw their beautiful church in ruins.

"THE BIG PUSH"

That was the Tommies' name for the battle of the Somme.

The battle of the Somme was planned as a British advance to relieve the pressure on Verdun, to take attention from the Russian front, and to harry the Germans, who had been resting too long safe in their trenches.

Ever since the beginning of 1916. whispers of the great spring offensive were floating hopefully around England. But it was not till summer that the drive began. In the meantime, the British, under Field-Marshal Sir Douglas Haig, were preparing. A great change had come over that "contemptible little army" since it had so gallantly saved the Allied retreat after Mons and held the line at Ypres. It was little no longer; no longer was it short of ammunition, short of hand grenades, overcome by gas. During those months of trench warfare which followed the battle of the Aisne, when the British doggedly held the "old front line," they were building a new army, a great military machine, and at the battle of the Somme it struck the Germans.

For two weeks in June the Allied infantry bombarded the enemy lines, the fire growing more and more intense; then on the 1st of July, at 7.30 in the morning, on a twenty-five-mile front, the Tommies and the poilus went over the top.

The battle of the Somme lasted from that day away into December. There is no space to tell of the details of this great struggle, of Combles, of Bapaume, of the brave deeds of the Scots and the Canadians, or even of those huge, ungainly monsters, the tanks, and their victorious drive, when they went lumbering against the enemy over hills, ditches, and trees and took the Germans by surprise. It was the biggest battle the world had ever known. Before the

Somme, Verdun was reckoned as the greatest conflict of the ages, but the Somme outdid Verdun. Verdun was a German offensive; the Somme was an Allied offensive. At Verdun the French held the Germans, but on the Somme the French and the English pushed the Germans back. It was an Allied victory.

But why did the Germans retreat? The Allies employed the same methods against them as they had employed at Verdun against the Allies—the heavy bombardment, the advance of the infantry. First of all, the Allies kept incessantly attacking; their idea was never to relax pressure for a moment. And besides, the Germans lacked fresh reserves to draw upon; some had been sent to the Russian front, and a great many had gone down before Verdun.

So, as it was, they were driven back. The battle of the Somme accomplished its purpose: it relieved Verdun and it worried the enemy, and it regained a strip of French soil seventy miles long and from ten to twenty-five miles broad. It did more than this; it opened the eyes of the Germans to many new things. They had considered their lines impregnable; the British broke them. They relied on their superior artillery; the Allies matched them; and finally they discovered that these armies, which they had once beaten back, were real armies; they discovered that the stuff of which the new British army was made was that of fighting-men out for victory. And the English themselves, who had been holding their line steadfastly against an enemy acknowledged superior in numbers, equipment, and positions, discovered that now at last they were a match for that enemy, and more than a match.

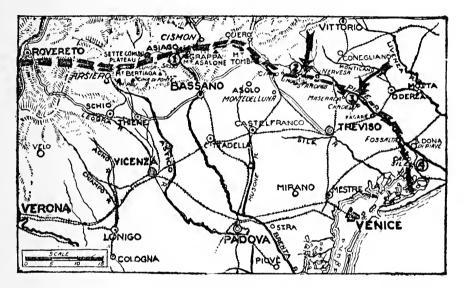
The battle of the Somme was the turning-point of the war. The Allies had stopped the Germans at the Marne; the French had resisted heroically at

Verdun, but on the Somme for the first time they took the offensive and struck a bruising blow.

Sir Douglas Haig in his report on the battle of the Somme sums up the situation: "The enemy's power has not yet been broken, nor is it possible to form an estimate of the time the war may last before the objects for which the Allies are fighting have been attained.

ON THE OTHER FRONTS

But in spite of Verdun and the battle of the Somme, the Germans still had hopes. For, during 1916 certain events were taking place on the Eastern front which buoyed them up: the halting of the Russian offensive, the conquest of Rumania, the failure of the Russian army in Persia to join the British; the



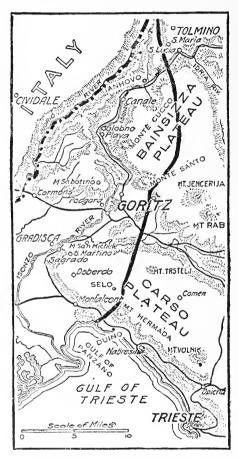
Scene of the Fighting on the Italian Front

But the Somme battle has placed beyond doubt the ability of the Allies to get those objects. The German army is the mainstay of the Central Powers, and fully half of that army, despite the advantages of the defensive, supported by the strongest fortifications, suffered defeat on the Somme this year. Neither victors nor vanquished will forget this; and though bad weather had given the enemy respite, there will undoubtedly be many thousands in his ranks who will begin the new campaign with little confidence in their ability to resist our assaults or to overcome our defenses." The English and French suffered heavy losses at the Somme, but the "big push" went on.

tragic defeat of the British by the Turks at Kut-el-Amara; the continuation of the submarine warfare. But, on the other side, there were the Russian offensive against Austria, under General Brusiloff, the taking of Gorizia by the Italians, the fall of Erzerum before the army of the Grand-Duke Nicholas, and the loss of all the German colonies and Germany's dream of a colonial empire.

Let us take up these events in detail. We remember how Italy went into the war in 1915 and began a campaign in the mountains and along the Isonzo River to recover her lost provinces—Icalia Irredenta. To understand the Italian campaign it is necessary to take a look at the map. Along the northern

part of the Adriatic runs a huge level plain, the Italian Piedmont. To the north of this plain are the Alps and the Trentino, an Austrian province. To the east of the plain are also mountains, but they do not rise until one has passed the border into Austria and crossed the



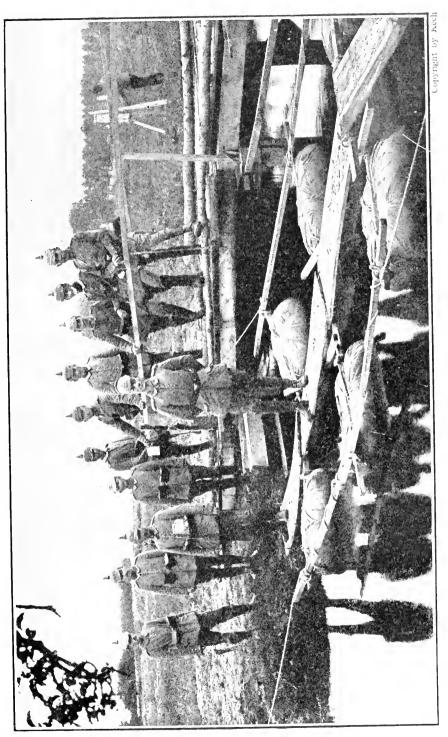
Italy's Drive Toward Trieste

Isonzo River. Gorizia is the principal city beyond the Isonzo; below and beyond lies the Carso, a rocky plateau, with its guardian mountain Monte San Michele; and still farther, around the curve of the Adriatic, is Trieste, that great prize for which the Italians aimed.

Thus the Italians had two fronts: one along the Isonzo, driving toward Trieste, and the other in the north, driving into the Trentino and holding

the mountain passes, for if these passes were lost and the Austrians could reach the plain, they would be able to cut the communication lines of the Isonzo army and overwhelm it. That is what they tried to do in the spring of 1916. Carefully they massed their men and munitions and fell upon the Italians. By the sheer force of numbers they drove them steadily from the mountain-peaks, which the Italians had won with such effort, until it almost seemed that they would reach the Piedmont. But there the Austrian offensive failed. It was a hard task to bring up all the supplies over the mountains. To capture the ridges meant untold losses of men and the constant use of artillery. And, furthermore, the Russians were getting active on the Eastern front, and Austria had no reserves to help her in Italy. So Cadorna, the great Italian general, seized his opportunity and turned the Austrian advance into a retreat. Slowly he pushed the enemy back over the mountain passes; and then, secure once more, turned his attention again to the Isonzo front. During the next few months the Italians steadily advanced toward Trieste; they carried Monte San Michele by storm; they captured Gorizia; by tunneling, by bombardment, by a hundred other methods, they scaled the Carso plateau and moved forward upon it, at the same time advancing on the Bainsizza plateau north of Gorizia. Though Trieste was still far away, the Italian campaigns were wonders of achievement. But we shall see how in 1917, by a trick of fate, the Italians lost all they had gained through two years of splendid effort.

As one cause of the failure of the Austrian offensive against Italy, we mentioned the Russian advance. Thus we see that, though far removed from each other, all the different fronts of the war, the Eastern, the Western, the Italian, the Mesopotamian, were all



Rivers No Obstacles to the Germans

The Germans had been so careful in preparing for war that when war did come they seemed able to march right on as if there weren't even rivers in the way. They simply sent some soldiers ahead of the army who had practised so much that they were able to build a bridge across the river even before the army had arrived.

closely connected, each one influencing the other.

After the great Russian retreat in 1915 the Grand-Duke Nicholas was transferred to the Caucasus, and General They exhausted the supplies which they had stored up, and no further supplies were forthcoming. And Germany came, as usual, to Austria's aid and bolstered up her failing front.



Crossing a Mountainous Torrent

Just imagine a black night, and having to cross a stream far up in the mountains, and full of ice. Bullets might be flying in the air, too, and still all you could do would be to go right on.

Brusiloff took his place; and under him began another big offensive, aimed at the heart of Austria. So successful was he that he captured over four hundred thousand prisoners and quantities of artillery and supplies. The Russians were again in the Carpathians. But again they were doomed to failure. It was the old question of ammunition.

This problem of ammunition was also connected with the defeat of Rumania. That little Balkan country joined the Allies in August, 1916, when General Brusiloff's successes were at their height. The Rumanians immediately and jubilantly invaded Transvlvania, an Austrian province, which had once been theirs. But in so doing they exposed

themselves to an attack on their flank through Bulgaria. Now, Bulgaria had a grudge against Rumania, because of the Second Balkan War, when Rumania had taken part of a province from her —the Dobrudja. So Bulgaria joined von Mackensen's German army and invaded Rumania. Rumania put up a plucky fight, but it was of no use. She was defeated and pratically wiped out, as Serbia and Montenegro had been before her. She had been led into war by the belief that Russia would come to her aid; but Russia, though she could have saved her little ally, did not move. She even cut off the supply of ammunition. Thus was Rumania betraved. Treachery; German influence in the Russian court; pro-German officials—these caused the failure of General Brusiloff's campaign and the fate of Rumania.

The conquest of Rumania was a great victory for the Central Powers in more than one way, for it gave them control of the Danube, and also brought them new lands, new wheat-fields, and new oil-fields with which to combat the English blockade.

A while ago we spoke of the army of the Grand-Duke Nicholas. He was sent to the south of Russia into the Caucasus, and from there, passing through the mountains and along the Black Sea, he invaded Turkey in Asia Minor. Erzerum, a powerful city fortified by eighteen forts, all equipped with German guns, fell before him. But, owing to the strength of the Turks, he was not able to follow up this victory.

It had been hoped that a juncture could be made between the Russian troops in northern Persia and the British forces that were advancing from the Persian Gulf up the Tigris River, with Bagdad as their objective. But the English suffered a terrible defeat. General Townshend's army, greatly outnumbered by the Turks, was caught

in the city of Kut-el-Amara and there besieged for many months. It is a tragic story. Many soldiers died of starvation or fever. A British force. sent to their rescue, advanced within seven miles of Kut, but could not relieve him. So General Townshend surrendered—a fact which was a great blow to the military reputation of the British in the East. The failure of the British campaign in Mesopotamia in some ways resembled the failure at Gallipoli: mismanagement, a breakdown of the system of supplies or reserves or medical care. After this crushing reverse, the English reorganized and later retrieved themselves by the capture of Bagdad and a victorious campaign in Mesopotamia.

THE GREATEST NAVAL BATTLE OF HISTORY—JUTLAND

For a long while the battle of Jutland was a mystery, as both sides claimed the victory. The German press was full of glowing accounts of how their fleet had met the British fleet, which they had so often asserted was in hiding, and had vanquished it. On the other hand, the report of Admiral Jellicoe and others made it clear that the British fleet was by no means defeated; that, in fact, the Germans had fled from it.

The German version of the battle was a political necessity at that moment. Their successes in the East had failed to win the war; their army was still pounding away in vain at Verdun and they needed some sort of a victory to cheer the discouraged people. And a naval victory was just the thing. Now, Germany had the second greatest navy in the world, but during the war it had been of little use. It had stayed for the most part bottled up at home, with occasional sorties, such as the one which led to the battle of Heligoland in 1914. A few of her cruisers had



Patrol Guarding the Fleet

It would be too much to expect that the whole fleet should do nothing but look out for submarines or sudden attacks. Instead, smaller, faster vessels are sent out which act somewhat as scouts and are the out-guards of the fleet.

wrought havoc upon the seas; the gallant *Emden* is the most famous, but she was soon captured by the English. German submarines were still operating around the British Isles, but as yet they had not starved England. A victorious encounter with the English fleet would be extremely helpful; perhaps that is why the German fleet started on May 31st "on a mission to the north." They probably knew well that the English battle-squadron were on one of their periodical "sweeps," when in two divisions they sailed over the North Sea in search of the enemy.

A squadron of battle cruisers under Admiral Beatty sighted a squadron of battle cruisers under Admiral von Hipper, and immediately gave battle. To von Hipper's help came the rest of the German battle-fleet; but they did not annihilate Beatty's ships, for he turned to the north, fleeing in the direction of the main British battleships, the Germans following him and keeping up a running fight. Presently he joined Admiral Jellicoe's fleet. But, after a brief engagement, the Germans retired to the south, as night was approaching and they felt they were outnumbered. Jellicoe's fleet tried to get between them and their home ports, but this was not successful, for, when dawn came, the German fleet had escaped safely. Evidently they had no wish to fight the main British fleet and try out their vaunted naval supremacy. They had been lured into pursuit of Admiral Beatty with the hope of crushing his squadron of light cruisers; the weather was so bad and hazy that their Zeppelins could not reconnoiter and inform them of the presence of the whole British Grand Fleet.

Thus ended the battle of Jutland. The Germans claimed great losses for the English and acknowledged the sinking of only one of their battleships and four cruisers. But since then it has

been admitted that their losses were much greater. They are usually estimated at two dreadnoughts, one battleship, one battle cruiser, five light cruisers, six destroyers, and one submarine. The British losses were: one first-class battle cruiser, two lesser battle cruisers, three armored cruisers, and eight destroyers.

This was the big naval engagement of the war, and the last. The British Navy still held the seas.

THE COLLAPSE OF RUSSIA

Since the spring of 1917 Russia has virtually been out of the war; because of that, we are apt to forget that once she was a military factor to be reckoned with. She had engineered two great offensives against Austria; she had fought the Turk; and of all the Allies she was the only one whose armies had crossed the border onto German soil.

We have seen that the failures of the Russians and their defeats were due not to the quality nor the numbers of the fighting-men, but to the treachery, graft, and mismanagement of the government at Petrograd. The government of Russia was an autocracy, under the absolute rule of the Czar; the Czar himself was a well-meaning but weak man, who was influenced by his wife and ministers. He was surrounded by a corrupt, intriguing court, which included many pro-German officials.

For years there had been an undercurrent of revolution in Russia, but the government with its ever-active police force, the *okrana*, kept vigilant watch and used strict measures in suppressing any kind of movement or thought against the autocratic rule of the Czar; exile to Siberia was the usual punishment.

The reverses of the war had fanned the flame of dissatisfaction; and there spread among the soldiers and the peo-



Portion of the Grand Fleet

It was the Grand Fleet which won the war, patriotic English sailors will say, for it was the Grand Fleet which made the German fleet stay in harbor, and which made it possible for supplies and troops to come from great distances, while Germany was shut out from any such advantages. The boast may be too great, but there is no doubt that the Grand Fleet played a determining part in the Great War.

ple the feeling that the Czar and his government were responsible for their defeats, losses, and tragedies, that the rulers of Russia had not only been unwise in their judgment and management, but had deliberately cast aside chances of victory, and had betrayed the Russian people to defeat and death.

So on March 9, 1917, the people rose against the Czar, and almost bloodlessly the great Russian revolution took place. The Czar abdicated; a republic was declared and a provisional government formed under Alexander Kerensky, who favored the Allies and the prosecution of the war.

For a few weeks all went well; order was maintained; crime decreased; it seemed as if the mighty country of Russia had found itself. Then enter the Bolsheviki.

That is such a familiar word to us now that we forget that before 1917 and the Russian revolution a Bolshevik was a creature unknown. Who were the Bolsheviki? They were a particular brand of socialists who believed in a form of democratic government by local committees, or societs. They were opposed to the war, for they were internationalists. That is, they believed in the union of all working-people of the world, regardless of country. They did not count the Germans as their enemies; their enemies were the capitalists, the rich land- and factoryowners. It has since developed by the discovery of documents that Lenin and Trotzky, the leaders of the Bolsheviki, who supplanted Kerensky as the directors of the Russian government, were in German pay and that they helped accomplish the disorganization of Russia.

The old autocratic government of the Czar had been centralized, it had controlled the entire Empire of Russia. But after the revolution the unity of Russia gradually melted away. Many

political parties came to the fore, of which Kerensky's party and the Bolsheviki were but two. The countries which had in the past been conquered and added to the Russian Empire broke away and formed their own republics: Livonia, Ukraine, Finland. Rival leaders sprang up—Korniloff and his Cossacks against Kerensky. And everywhere was spreading Bolshevik doctrines, even to the soldiers in the trenches. "Why fight the Germans? They have done nothing to us. They are our brothers. Let us go home and live peacefully, and if we must fight, fight the rich men who have robbed us." Thus discipline broke down at the front and the Russian army threw down its arms and dropped out of the war.

During 1917 the condition of Russia grew gradually worse. According to their socialistic ideas, the Bolsheviki took over the factories; but they failed to run them successfully. The manufacturers and the commercial middle classes were suppressed. Industry and transportation broke down, and anarchy followed, with spasmodic fighting, pillaging, and starvation.

In the meanwhile the Bolsheviki made peace with Germany in 1918—at the famous treaty of Brest-Litovsk—virtually giving over the control of their country to Germany. However, on account of the uncertain and terrible conditions in Russia, Germany was never able to achieve a real conquest.

The collapse of Russia was a great blow to the Allied cause. Not only did it open up to Germany new sources of supply, such as the wheat-fields of Ukraine, but it also set free the thousands of soldiers on the Eastern front. The German forces which had been employed against Russia could be transferred to France, while Austria would be able to launch another offensive against Italy. On the other hand, the Allies had still many fronts to keep supplied



Germans Entering a Russian Town They Had Bombarded and Set on Fire

Libis remarkable photograph of one of the horrors of war was made just after the Russians had evacuated the town. Flames were still raging in many places, having been started by the continuous bombardment. The Germans marched through streets darkened by smoke. The inhabitants had nearly all fled, days before, and their houses were destroyed with all that they contained.

with troops: Mesopotamia and Palestine, where they were fighting the Turk; Salonika, where they kept a force waiting to strike. The U-boats were getting in their work, too; Eng and was feeling the pinch. But at this most discouraging hour they did not forget that they had a new ally:

THE UNITED STATES ENTERS THE WAR

Let us go back to the submarine question. Our country had had many discussions with the German Imperial government on that subject; at last, in March, 1916, after the Sussex episode, when relations between us and Germany were at a breaking-point, Germany backed down from her position and pledged that she would sink no ships without warning. So for a while all went well.

Then suddenly, on January 31, 1917, urged by the clamor of the German people for retaliation against the English blockade, Germany went back on her pledges and announced that henceforth she would make unrestricted use of the submarine; the seas around Great Britain, France, and Italy would be closed to navigation; ships caught within these "barred zones" would be sunk. Germany would, however, allow one American passenger-ship to sail to and from Falmouth every week, provided it followed the course marked out by the German government and was painted with United States insignia as the Germans directed.

In other words, Germany was giving us orders about our ships and our commerce. Our course was plain before us. On February 3d we severed diplomatic relations with Germany; Count von Bernstorff was handed his passports; we armed our merchantmen against the submarine. Germany carried out her plan of "ruthless" submarine warfare and sank three of our ships. After this

overt act, on April 6, 1917, with the authorization of Congress, the President declared hat a s ate of war existed between the United States and Germany.

Germany laughed at us. We had no army, she said; and if we could gather and train one we would not be able to get it across the seas; and if we should get some soldiers to France they wouldn't fight, anyway. But Germany had to eat her own words. We sent an army of two million overseas, and Château-Thierry, Belleau Wood, and the Argonne have proved that our men could fight and did fight.

But in April, 1917, this country was woefully unprepared. However, it set itself quickly and valiantly to the task. We ourselves have witnessed this preparation; we have seen the men who hurried to enroll themselves in the Army or the Navy and the Marine Corps; we know about the draft bill which passed Congress in the spring of 1917 and called to the colors thousands of young men for the national army; we have watched the huge cantonments and camps springing up all over the country to train our new army; we are familiar with the factories turned to the manufacture of munitions, of artillery, of gas-masks, motor-trucks, airplanes, and tanks; of the Liberty Loans, the immense outburst of ship-building— American ships under the American flag-and the campaign for food-conservation, so we could supply our Allies. In those days of 1917 we did not do much real fighting, but we were preparing for the great year of 1918 and its terrific battle.

On June 8th a small group of officers under General Pershing landed in France. But it was not till October that our soldiers fired their first shots. But our engineers were already abroad, building docks and railroads to land and transport our army that was to come;



On the March at Fort Sherman

Germany laughed at us and said our Army could not fight before we got into the war, but these boys and over two million others showed the Kaiser he had guessed wrong.

and at home the government was organizing itself for the tremendous task of feeding and equipping this army three thousand miles from home.

Our Navy did its duty from our entrance into the war. Joining with the Allies, it helped patrol the seas in the war against the U-boats. The Atlantic and the Mediterranean saw our destroyers.

Though in 1917 we did not give much material aid to the Allies, beyond lending them large sums of money, still our coming into the war had a distinctly encouraging effect. They knew they had an ally of powerful resources, and that if these resources could only be marshaled they could turn the scales of war.

The story is told of the first American troops that went into the trenches. The shift took place, as usual, at night. It was dark, and the French who were coming out went stumbling along the road to the rear without noticing who was relieving them. Then suddenly a French officer, pulling himself up mechanically to salute, noticed the newcomers. He stood stock-still, staring, his hand still raised.

"The American relief," he whispered as if in a dream; and quickly down the line went the miraculous words:

"The American relief has come!"

THE HINDENBURG LINE

In the meantime, while Russia was slowly crumbling to pieces as a country and a military power, and while the United States with haste was preparing for war, what was happening on the Western front? The last event of which we have spoken was the battle of the Somme, which drove the Germans back from the trenches which they had held for three years. In 1917 occurred another of those strategic retreats, so famous in the war—the retreat of the Germans to the Hindenburg line.

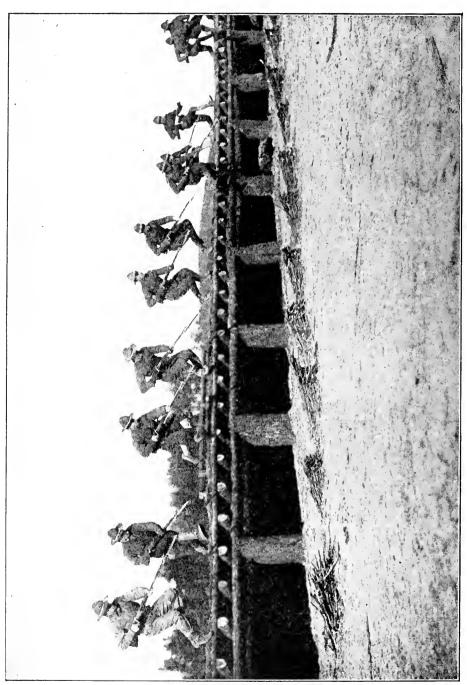
This line had been carefully selected and laid out by the Germans. naturally strong positions were enhanced by all kinds of defenses: barbed wire, underground tunnels, huge dugouts. When they retired to this line the Germans had laid the country waste behind them, destroyed vegetation, houses, villages, bridges, roads, and railways, so that the advance of the Allies would be as difficult as possible even before they reached the enemy's line. break or even push back the Hindenburg line, according to the Germans, would take an infinite number of men and enormous resources. The line was impregnable. Safe in its defenses, the Germans could wait until they could mass their reinforcements from the Russian front and strike the deathblow at the Allies.

Some of the assaults of the Allies against the Hindenburg line are wellknown history: the famous battle of Vimy Ridge, when the Canadians threw themselves with vigor into the battle and swept over the ridge; Paschendaele Ridge, the objective of the British drive in Flanders; the French drive along the Aisne and the Chemin des Dames, where it has been said their chances of making a final smash into the German lines were cut short by interference from Paris and political discussions; and the battle of Cambrai, under General Byng, where the British with their tanks dashed ahead of their own plans and objectives, and later, not having sufficient support, were forced to

All these attacks were partially successful, but the Hindenburg line, intact, still crossed France.

THE ITALIAN DISASTER

Some of the most interesting events of the war, as we have already pointed out, were the retreats: the retreat of the



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Over the Top They Go!

These are some of the boys who smashed through the Hindenburg line. This picture was taken before the men went to France. It was by hard training like this that they became such good fighters.

English from Mons, the great Russian retreat, the retreat of the Germans to the Hindenburg line. But perhaps the most terrible and the most tragic retreat of all was that of the Italians in the fall of 1917. Through this retreat they lost all the ground they had gained during two years of hard fighting against tremendous odds.

What caused this retreat? There are many explanations. The Italian War Office first described it as "cowardice." According to General Cadorna, "The violence of the enemy's attack and inadequate resistance broke our left wing." Inadequate resistance might mean a variety of things. But the collapse of the Italian Second Army is usually laid to the influx of socialist and pacifist ideas among some of the units. It was a clever ruse on the part of the Central Powers. Opposite the Second Italian Army they placed Austrian socialists, who fraternized with the Italians, already weary of the war, and expounded the idea that if both sides should lav down their arms there would be no more war. These Austrian troops were later replaced by German shock troops, who, when they attacked the already demoralized Italians, were able to march through the line and threaten the rear of the whole Italian army on the Isonzo front. We must also remember that the strength of the Germans and Austrians had been greatly increased by the Russian collapse and as a result they outnumbered the Italians. This was a contributory cause to the Italian defeat.

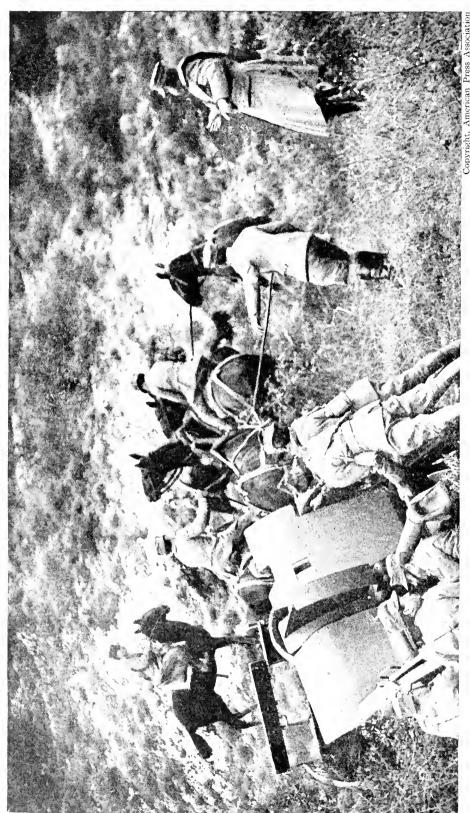
As it was, a gap was opened up in the Italian lines and through this gap poured the enemy. But in this prime purpose they failed, for, though they made many prisoners and captured quantities of guns, they did not outflank the main Italian army. This army, forced to retreat to save itself, retired hurriedly, but in an orderly fashion and with gallant rear guard

action, from the ground which they had Abandoning ammunition and supplies, they fell back from the Carso, giving up Gorizia, and recrossed the Isonzo. In Italy, they did not make their stand until, leaving behind them the city of Udine, they finally reached the river Tagliamento. But even this position they were obliged to abandon, and retire still farther, to the river Piave, where, twenty miles from Venice, at last, with the help of British and French reinforcements rushed to their aid, they recovered themselves miraculously and under General Diaz held the enemy. It was here in the marshlands at the mouth of the Piave that the Italian engineers cut the dikes and let the waters of the Piave drown out part of the advancing foe.

A LESSON FROM DEFEAT

The pictures of the Italian retreat were indeed pitiful as well as heroic: the roads crowded with footsore, discouraged soldiers and hordes of homeless refugees, women and children, fleeing before the invader; motor-cars, guns, carts, and caissons; above them Austrian airplanes hovering; the rush for the bridges at the rivers; the holding of the bridges till the army had passed; the burning of the bridges; the noble work of the armed motor-cars and the Italian rear guard which stayed the enemy advance; and, during a good part of the time, the rain pouring down upon the retreating multitudes, civilians and soldiers.

According to Frank Simonds, the Italian disaster was a great lesson. It showed what unity of command can do against divided action. The French and English were busy on the Western front; the reinforcement arrived too late to stop the sacrifice of the masterly Italian campaign of the past two years, and the sacrifice of miles of Italian territory.



Italians on the Austrian Frontier

The Italians were great mountain fighters. They were fully a match for the Austrians, and with the exception of their disastrous retreat in the fall of 1917, they met no serious reverses.

THE GREAT GERMAN OFFENSIVE—THE CRUCIAL PERIOD OF THE WAR

The spring of 1918 was the crucial period of the war. As soon as the winter broke the Germans started their last great offensive on the Western front. They knew that for them it was now or never. Their successes in the east had not won the war. Italy was holding the Austrians at bay. In spite of the ruthless U-boat campaign, England was still unconquered, and American transports were landing in France. Reinforced by troops from Russia, Germany must strike, and strike hard, before the armies which the United States was building could swell the ranks of the Allies. Thus, on March 21st, Germany struck the first blow.

In their attack the Germans employed what is called the von Hutier method—that is, they selected from every regiment the strongest and most able men; these shock troops, as they were called, led the attack, while the weaker brought up the rear or guarded the quiet sectors of the front.

Under General Ludendorff, the whole German offensive was carefully worked out; extensive preparations made; men and artillery massed at the needed points; everything in readiness for the last mighty attempt at victory.

That an offensive was coming was well known to the Allies; but where the first blow would fall was a mystery. It came in Picardy on the old battlefield of the Somme, on a fifty-mile front, from below Arras down to the river Oise. Its object was to cut between the French and English lines, separate them, and then, with the English forced back upon the coast and the French retreating toward Paris, achieve an easy victory. This object the Germans did not accomplish. The Allies' line did not break.

We all remember that terrible week

in March when, under the terrific force of the German attack, the onslaught of dense masses of men, the French and English fell back and back and back. and as the drive rolled on resistlessly we held our breaths and whispered "Will the line hold?" It held. From March 21st to March 30th the Germans advanced, retaking all they had lost in the battle of the Somme, bending the British line, making a big new salient, and threatening the city of Amiens. The British, though retreating, fought doggedly. Reserves were rushed up, and the German advance gradually spent itself, growing less and less, until at last, exhausted, it paused for rest.

The great weakness of the Allies was the fact that there was no unity of command; the French, the Italians, each had their own general. During the German advance upon Amiens the Allies finally realized this difficulty, and General Ferdinand Foch was appointed commander or generalissimo of the Allied forces.

At the same time, Premier Lloyd George of England, seeing the desperate situation of the Allies, appealed to President Wilson for more American troops—one hundred and twenty thousand a month. To that call we responded. Our troop-trains and our transports, full to overflowing, rushed to the rescue, while General Pershing immediately put at Marshal Foch's disposal all the American soldiers in France to help stem the German offensive.

For that offensive was not over. After a short breathing-space the German military machine struck again. This time to the north in Flanders, below Ypres, at the railway center of Hazebrouck and beyond it toward the Channel ports. Again they piled up their preparations and their men and, advancing in close formation, hurled masses of troops at the English positions. Again the steam-roller moved forward,



Italy's Battleground

Italy's battleground consisted of mountains and more mountains. Her soldiers had to fight on these mountains, right in the midst of the snow and ice. This is the Stelvio Pass across the Alps, about ten thousand feet above sea-level. This view is looking toward the Italian boundary between Italy and Austria.

over the defenses of Messines Ridge, which the English had won with such cost, and on past Armentières to Kemmel Hill. Then it was that Field-Marshal Haig issued his famous "back to the wall" order, calling on the British to stand firm. Again the German advance died down; and again another big salient was driven into the Allied lines.

But all the time, what was happening to the American troops in France? They were fighting with the French and English; they were proving their mettle. Twenty-five miles of front they held in Lorraine; and one day in the Toul sector the Germans attacked, "to give these Americans a lesson," they said. The battle of Seicheprey is the name of this little encounter. According to the German despatches, they raided the American lines and returned to their own, as had been arranged; but the truth of the matter was that these Americans whom they had scorned as soldiers made things so lively that the Germans could do nothing but retire before them. Later, farther north, during counter-attacks, the Americans made their first attack, showing their fighting qualities by capturing Cantigny. But it was in the stemming of the third and last German drive that the United States troops won their greatest laurels.

This offensive began May 27th, just a month after the failure of the drive to the Channel ports. So exhausted were the Germans that it took them four weeks to prepare for another blow; and in that time the Allies were also preparing, and ships were coming in from America. The third drive was aimed straight at Paris, and, like the other two, it started with a great momentum. The Chemin des Dames fell; Soissons fell, and once more the Germans were at the Marne. But at Château-Thierry on the banks of the Marne, at the farthermost point of their

advance, they were halted. We have all heard the story of the Marines, "first to fight," who with their machine guns checked the Germans at Château-Thierry and blocked the bridge across the Marne; how, later, other units of the Marine Corps drove the Germans in a fierce fight from Belleau Wood, a stronghold of machine-gun nests, and how the American troops in this salient counter-attacked and won back French But it was not so much the retaking of ground that mattered; it was the psychological effect upon the Germans. They had been told the Americans couldn't fight and wouldn't fight. now they knew that these tales were false. They knew they were faced by masses of men fresh from across the seas, who could fight and would not be defeated.

Again and again General von Ludendorff tried to turn his drives into victory; he struck toward Paris; he made an attempt to work around Rheims and capture it; he effected crossings on the Marne. But nowhere was he successful. The middle of the summer came. The great German offensive, for which such costly preparations had been made and in which thousands of lives had been sacrificed, was over.

THE GREATEST BATTLE OF THE AGES—FOCH'S COUNTER-OFFENSIVE

"The offensive is the thing," was Foch's firm belief. On July 18th, before the Germans could know what was coming, he struck his first blow.

Let us take a look at the battle-line on that day. It began at the Belgian coast, running south to Ypres. Then came a bulge, the Lys salient; again the line ran south, and again another bulge, beginning below Arras, skirting Amiens, its tip beyond Montdidier, and circling back again to the straight line at the Oise. Almost directly south of

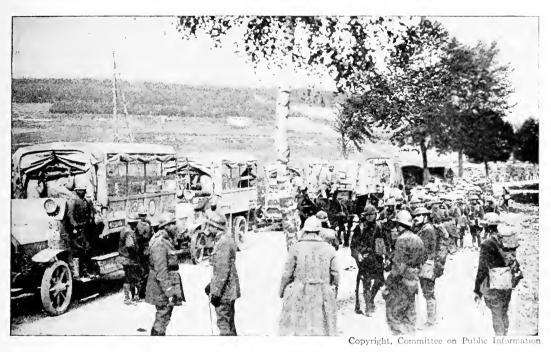


French Soldiers Instructing Americans

The necessity was so great that many of our citizen-soldiers were sent abroad without a great deal of training, but they found the French only too glad to instruct them further in the art of war.

this salient another salient jutted out, the famous Soissons-Rheims pocket, which extended to the Marne, the northern end of its entrance resting at Soissons, in German hands, and the southern end of its entrance at Rheims, still in French hands. From Rheims the line ran east to Verdun, then diforest region which would not make a quick and easy avenue of retreat.

Foch's strategy may be summed up thus: the wiping out of the four salients, the Marne, the Lys, the Picardy, and the St.-Mihiel; the developing of two salients of his own on the Hindenburg line at Cambrai and at Laon, and by



Marines Advance to Bois de Belleau

Many of the roads were crowded with motor-trucks and men in the thick advance of the Marines.

rectly south, forming the St.-Mihiel salient; from there southeast to Switzerland. Thus we see that the German line from the North Sea to Metz formed of itself one big salient. To crush out this salient was General Foch's problem.

The German lines were fed by two main railways from Germany—one through Belgium by way of Liège into France, and the other running from Mezières in France, through Sedan down to Metz. Just as all supplies came over these railroads, so they afforded the only means of retreat to Germany. For between them lay a mountainous

means of these salients penetrating the Hindenburg line and pushing back the enemy in the north beyond Cambrai and St.-Quentin and Lille, so that their railroad through Liège would be menaced; and at the same time advancing along the coast of Belgium, and from St.-Mihiel and Verdun northward to Sedan, threatening the other great railroad. The success of these operations would crush the two ends of the German line and inflict a decisive defeat.

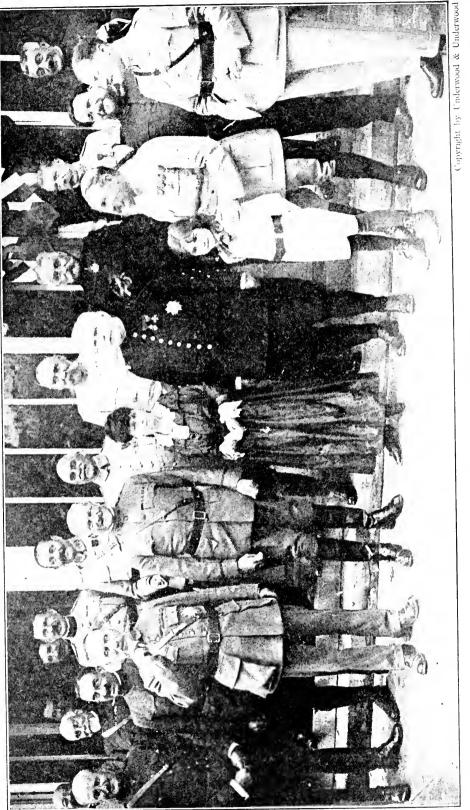
Foch's plan of attack was different from von Ludendorff's. The Germans, as we have seen, struck tremendous blows which for a while carried all before them; but these drives necessitated enormous and lengthy preparations. Foch never paused a moment when he started his counter-offensive. He struck one place, then another, with lightning quickness. It can be imagined what effect these tactics had upon the Germans. They did not know what was coming next. Their losses had been terrific during their great drives; the resources of their country, worn out by England's blockade and the drain of the The line, on account war, were failing. of the salients, was longer than it had ever been and therefore required more men to hold it. Besides, when the Allies suddenly assumed the offensive. it came as a surprise to the Germans. The sudden success of their enemy, whom but a few weeks before they had had running before them, was a blow to their confidence and a shock to their morale.

In this confidence of theirs, the Germans had left improperly protected that side of the Marne salient extending from Soissons to Château-Thierry; and it was there that Foch delivered his first attack, following it up by further attacks from the south and the west. German reserves were rushed up, but it was of no use. From July 18th to August 4th the French and the Americans drove the Germans steadily back, recapturing Soissons and miles of French territory, and forcing the enemy to abandon or destroy quantities of supplies and ammunition. The Germans did not wish to be trapped in the Soissons-Rheims pocket.

Having wiped out the dangerous Marne salient, which had threatened Rheims, as well as Paris, Foch struck his second blow right in the center of the Picardy salient. This battle has been called the third battle of the Somme. The British beat back the invaders, retook Albert and Péronne and Bapaume,

while south of them the French were advancing, having taken Montdidier and Noyon, east along the Oise toward the St.-Gobain Massif, a stronghold of the Hindenburg line. And another British army was attacking in the Lys salient, toward Messines Ridge. Everywhere along the entire front the Allies were striking. The Germans, realizing that the great offensive had failed, were attempting to make an orderly retreat to the Hindenburg line, and there behind their strong defenses wait safely till they could re-establish themselves or till diplomatic channels could bring peace. But Marshal Foch was not content merely to stop the German offensive and bring conditions back to a deadlock; victory was his object. He would not let the Germans retire peacefully and slowly as they had done in 1917. At their heels came the Allies. "The race for the Hindenburg line," this phase of Foch's offensive has been called. But the Allies did not stop at the Hindenburg line. Haig's forces on August 25th crossed this impregnable line, cutting through the Drocourt-Quéant switch line, a line of defense in the rear and advancing toward Douai and Cambrai, positions which would threaten the great railroad in the north.

In the south, too, Foch was carrying out his strategic plan. The Americans, under General Pershing, in their first independent operation, "mopped up" the St.-Mihiel salient. This salient had projected into the Allied lines for four years. It took the American army twenty-seven hours to destroy it, recovering a hundred and fifty-five square miles of French land, and capturing many prisoners and guns and stores. The pincers plan of attack was used; two forces drove against the two sides of the salient. But many of the Germans, realizing their perilous position, escaped before the scissors closed upon them. Having eliminated the St.-Mi-



The Smile of Victory

All of these heroes belped to defeat Prussianism. In the front row, from left to right, are: Marshal Foch; General Pershing; Madame Dubail, wife of the military governor of Paris, and his son; General Pelltier and General Galopin in the rear, on either side of Marshal Joffre.

hiel salient, Pershing was in such a position that he could bombard the outlying forts of Metz.

Thus Foch's plan was working well. He had wiped out the four salients, thus undoing all the work of the German offensive, and taking away the menace from Rheims, Paris, and Amiens, and freeing the important railway lines. In the north he was hammering away at the Germans, even penetrating the Hindenburg line and coming closer and closer to their main railroad through Belgium. In the south his forces were in a position to begin the northward move through the Argonne Forest to cut the Hindenburg line and menace the other railroad.

According to *The Literary Digest*, there were two Hindenburg lines—one the physical line of trenches, dugouts, forts, and barbed wire, which meant absolute security; the other, the mental line, the confidence of the German army in its military leaders. At both these lines Foch was striking crashing and fatal blows.

But he did not confine himself to the Western front alone. Great events were taking place on the other fronts: the Balkan, Palestine, the Italian front.

THE COLLAPSE OF GERMANY'S ALLIES

September witnessed a great campaign against Bulgaria. We remember that Rumania, Serbia, and Montenegro had all been overrun by the German-Austrian-Bulgarian army. But the Germans and Austrians had been obliged to withdraw the greater part of their forces for use on other fronts, and had left to Bulgaria the task of holding the Balkan front.

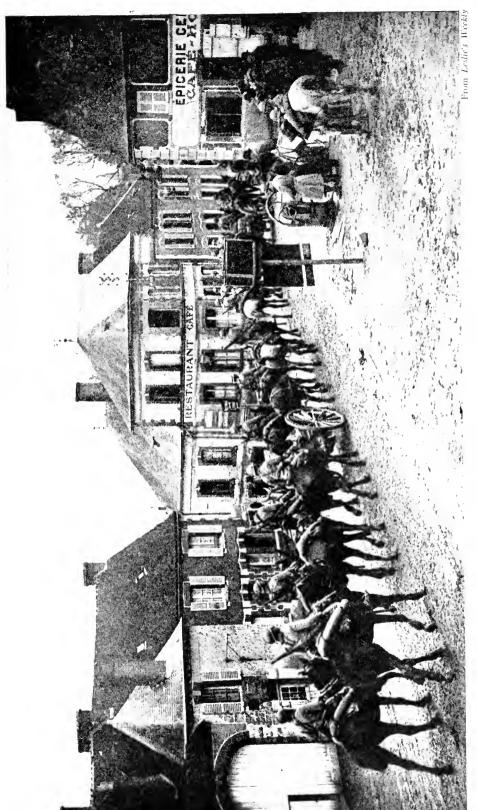
The Serbian army, at the time of its great defeat, had retired to the mountains and across Albania to Italy. Now it returned to the fight, joining with the French. The forces of the Allies at

Salonika, which had been so long inactive and which had been so often criticized as useless, now showed their real purpose and value. They marched northward toward the Bulgarian border, while farther west the Serbian-French army advanced steadily through the mountains, up the valley of the river Vardar into Serbia. Town after town fell; they went on toward Nish, the great railway center, driving the Bulgarians in disorder before them. Their advance cut the line of communications between the Bulgarian in the west and the eastern Bulgarian army which was facing the Salonika forces. Bulgaria. seeing that her armies were caught and that the situation was hopeless, on September 28th opened up negotiations for an armistice. Unconditional surrender was the answer. Two days later Bulgaria accepted the terms and withdrew from the war.

The surrender of Bulgaria showed the weakness of the Central Powers; for the first time Germany could not come to an ally's aid. It also cut Turkey off from Germany, thus banishing the dream of "Mittel Europa," and, by exposing Turkey's northern frontier, paved the way for Turkey's surrender.

When we last spoke of the British campaign in Mesopotamia it was to mention the tragic defeat of General Townshend at Kut-el-Amara. After this disaster, however, the British recovered themselves and, under General Marshall, advancing northward up the Tigris, captured Bagdad. They were hindered in their progress by the collapse of the Russian armies, in 1917, when the Caucasus campaign, which had started so brilliantly with the capture of Erzerum, went completely to pieces.

In Palestine was another Allied force under General Allenby. This army in 1917 had already made a northward advance which ended in that dramatic



Column of Foch's Cavalry

The motor-truck had a great part in the war, but that did not mean that the cavalry was no more. Among the spectators in this picture are members of the American Labor Commission that visited France.

event, the taking of Jerusalem. It was the first time since the Crusades that Jerusalem had been in Christian hands. General Allenby planned to make further gains and join the Mesopotamian army at Aleppo. He was opposed by the main Turkish armies under a German toward Aleppo; while at the same time, east of the Arabian desert, General Marshall was advancing to the meeting-place. But Turkey, with the Allies in control of Bulgaria, and Constantinople thus exposed to attack in the north, with her armies in the east completely



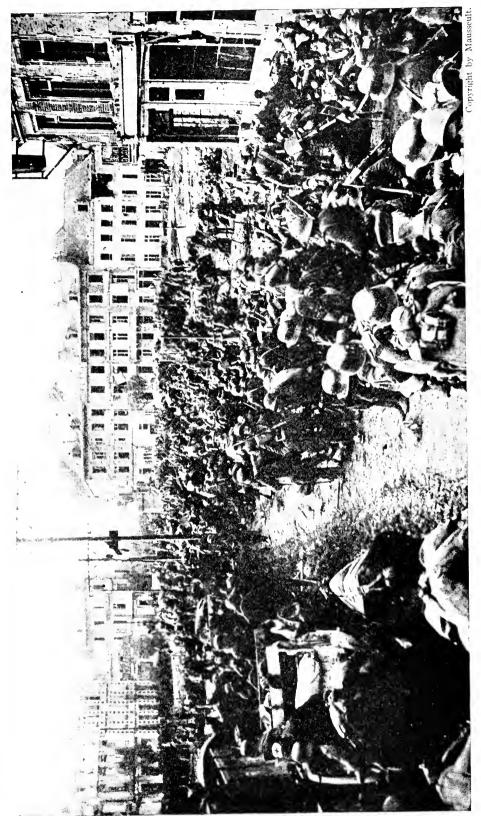
Palestine and Its Relation to the Suez Canal and Mesopotamia General Allenby's taking of Jerusalem marked the first time since the Crusades that Jerusalem had been in Christian hands.

general; but in September, 1918, he began the attack. First of all, he struck in the east along the historic valley of the Jordan; then, while the Turkish forces were thus engaged, he delivered another blow at the seacoast, broke the line and, sending regiments of cavalry through the gap, encircled the Turks and cut off their retreat. Eighty thousand Turks surrendered; the others fled in little disorganized bands. The English pushed on, taking Damascus,

routed and the Allied forces moving forward, saw that all was over, and on October 30th followed the example of Bulgaria and surrendered unconditionally to the Allies.

Germany had but one ally still in the field—Austria. And her collapse was imminent. The Austrians, in 1917, as we remember, had forced the Italians back in a terrible retreat to the banks of the Piave. In June, 1918, while the Germans were hammering away at the

X1-4



Streets of St.-Quentin

St.-Quentin has been called the shuttlecock of the Western front—buffeted, as it was, from the Germans to the Allies, and from the French to the Germans. The German hare may have covered the ground, but the stolid Allied tortoise had the winning spirit.

Marne salient, they again launched an offensive, hoping this time to drive the Italians back upon the plain and thus open up northern Italy and an entrance into France. This offensive was a fail-The reorganized Italian army stood firm against the Austrian attack, and even drove their enemies back across the Piave. For a while there was quiet on the Italian front; then Foch, following up his plan of continually striking at different points on all fronts, as well as up and down the lines in France, started an Italian offensive. This attack began October 24th; before its onslaught the Austrian army and the Austrian defenses crumbled to pieces. In the space of a few days the Italians, sweeping all before them, captured thousands of prisoners and regained miles of territory. The advance of General Diaz cut the Austrian army along the Piave from the Austrian army in the mountains; and on November 4th, Austria bowed to fate and surrendered to the Allies.

Germany's last ally was gone. She herself and her own armies were in a perilous position on the Western front.

"WE STILL CONTINUE TO PURSUE THE ENEMY IMPLACABLY"

Thus reported Marshal Foch. Having forced the Germans from the gains of their offensive, having penetrated the Hindenburg line to the north and destroyed the St.-Mihiel salient in the south, Foch kept on delivering his telling blows and following out his strategic plan.

Let us look at the situation in the middle of September. In the north, the British armies were closing in on Douai and Lille. To the south of them, the French and Americans were developing an encircling movement on the St.-Gobain Massif and from it toward Laon and La Fère, one force advancing west

of Soissons and the other force from the north.

Then, on September 18th, Foch struck at the center of the German line. In a bloody battle, lasting for days, the Allies drove on toward Cambrai and October 9th took the city, thus breaking the Hindenburg line at another spot. At about the same time, St.-Quentin fell, and further south, the French penetrated the St.-Gobain Massif and captured the Chemin des Dames and Laon and La Fère, three strongholds of the German line. While in the north along the coast, the Belgian army, combined with the British, on September 28th began an attack and drove the enemy from their submarine bases, Ostend and Zeebrugge and the English Channel, back across Belgium. The impregnable Hindenburg line lay well in the rear of the advancing Allies. The Germans were in full retreat toward Germany. But the way to Germany was not yet open. The railroad through Belgium was in a dangerous position, due to the Allies' advances. On the north, the Belgians and British were pushing one extremity of the huge salient, formed by the German lines in France and Belgium; and in the south, General Pershing, advancing through the Argonne Forest, was pressing fast on the other extremity and menacing the other railroad of retreat.

The battle of the Argonne was the great achievement of the American army. The defenses of the Germans north of Verdun were the strongest they had: a network of trenches and barbed wire, steel forts, deep dugouts, and machine-gun nests hidden away in the foliage of the forest. On September 26th, the American attack began on a twenty-mile front; our troops threw themselves against the Hindenburg line and carried it. But behind this line were still further defenses. In furious fighting against crack German regi-

ments, thrown recklessly against them, our soldiers pushed forward foot by foot. The resistance was fierce. The Germans knew the importance of holding their line and rushed up reinforcements. The advance through the forest

that line. Already our soldiers had penetrated it at many points. From October 10th to the 16th, the American army battered its way through the Kremhilde line to Grand Pré. From there the Allies made a great assault,



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German Guns Concealed in the Argonne

A battery of 77-mm, guns well protected from observation. The Germans were nestled in the woods, but the Americans kept right on, and finally the Argonne Forest was cleared of the enemy.

was difficult and the fighting bitter. But still the Americans kept on. The enemy launched heavy counter-attacks but our army held its ground. Many stories are told of their gallant deeds, such as that of the Lost Battalion. At last, by October 10, after three weeks of desperate fighting and continuous advancing, the Argonne Forest was cleared of Germans.

Beyond the Argonne, ahead of the American army, lay the last German line of defense in France, the Kremhilde Stellung. Pershing's job was to break and on November 6th reached the western suburb of Sedan and the important railroad running from France to Metz.

"The strategical goal which was our highest hope was gained," reported General Pershing. "We had cut the enemy's line of communications and nothing but surrender or an armistice could save his army from complete disaster."

In the north also the Allies were carrying all before them. Foch's strategy was successful. The great salient of the German lines was in his power. There was no escape for the German army.

So on November 8th the Germans applied to the commander of the Allied

forces for an armistice. They accepted the Allies' terms; and on November 11th, at eleven o'clock in the morning, fighting ceased. The Great War was over.

IN FLANDERS FIELDS

By Lieut.-Col. John McCrae Died in the Service January 28, 1918, and Buried in Flanders Fields

In Flanders fields the poppies blow
Between the crosses, row on row,
That mark our place; and in the sky
The larks, still bravely singing, fly
Scarce heard amid the guns below.

We are the dead. Short days ago.
We lived, felt dawn, saw sunset glow,
Loved and were loved, and now we lie
In Flanders fields.

Take up our quarrel with the foe:
To you from failing hands we throw
The torch; be yours to hold it high.
If ye break faith with us who die
We shall not sleep, though poppies grow
In Flanders fields.

Courtesy of G. P. Putnam's Sons. From In Flanders Fields and other Poems, by John McCrae.

IN FLANDERS FIELDS

By R. W. LILLARD

REST ye in peace, ye Flanders dead!
The fight that ye so bravely led
We've taken up! And we will keep
True Faith with you who lie asleep,
With each a cross to mark his bed,
And poppies blowing overhead
Where once his own life-blood ran red!
So let your rest be sweet and deep
In Flanders fields!

Fear not that ye have died for naught; The torch ye threw to us we caught! Ten million hands will hold it high, And Freedom's light shall never die! We've learned the lesson that ye taught In Flanders fields!

Courtesy of The New York Evening Post.

MILITARY COMMANDMENTS

Advice Given by Two Great Generals to Their Men

Field-Marshal Earl Kitchener

YOU are ordered abroad as a soldier of the King to help our French comrades against the invasion of a common enemy.

You have to perform a task which will need your courage, your energy, and your patience. Remember that the honor of the British army depends on your individual conduct.

It will be your duty not only to set an example of discipline and perfect steadiness under fire, but also to maintain the most friendly relations with those whom you are helping in this struggle.

The operations in which you will be engaged will, for the most part, take place in a friendly country, and you can do your own country no better service than in showing yourself in France and Belgium in the true character of a British soldier by being invariably courteous, considerate, and kind.

Never do anything likely to injure or destroy property, and always look upon rioting as a disgraceful act.

You are sure to meet with a welcome and to be trusted. Your conduct must justify that welcome and that trust.

Your duty cannot be done unless your health is sound, so keep constantly on your guard against any excesses.

In this new experience you may find temptation both in wine and women. You must entirely resist both temptations, and, while treating all women with perfect courtesy, you should avoid any intimacy.

Do your duty bravely. Fear God and honor the King.

Marshal Foch

KEEP your eyes and ears ready and your mouth in the safety-notch, for it is your soldierly duty to see and hear clearly, but as a rule you should be heard mainly in the sentry challenges or the charging cheer.

2. Obey orders first, and, if still alive, kick afterward if you have been wronged.

3. Keep your arms and equipment clean and in good order; treat your animals fairly and kindly and your motor or other machine as though it belonged to you and was the only one in the world. Do not waste your ammunition, your gas, your food, your time, nor your opportunity.

4. Never try to fire an empty gun nor at an empty trench, but when you shoot, shoot to kill,

and forget not that at close quarters a bayonet beats a bullet.

5. Tell the truth squarely, face the music, and take your punishment like a man; for a good soldier won't lie; he doesn't sulk, and is no squealer.

6. Be merciful to the women of your foe and shame them not, for you are a man; pity and

shield the children in your captured territory, for you were once a helpless child.

- 7. Bear in mind that the enemy is your enemy and the enemy of humanity until he is killed or captured; then he is your dear brother or fellow soldier beaten or ashamed, whom you should no further humiliate.
- 8. Do your best to keep your head clear and cool, your body clean and comfortable, and your feet in good condition, for you think with your head, fight with your body, and march with your feet.
- 9. Be of good cheer and high courage; shirk neither work nor danger; suffer in silence, and cheer the comrades at your side with a smile.
- 10. Dread defeat, but not wounds; fear dishonor, but not death, and die game; and whatever the task, remember the motto of the division, "It Shall Be Done."

THE EVENING STAR

By HAROLD SETON

THE evening star a child espied,
The one star in the sky.
"Is that God's service flag?" he cried,
And waited for reply.

The mother paused a moment ere
She told the little one:
"Yes, that is why the star is there!
God gave His only Son!"
—McClure's Magazine.

II. THE WAR IN CHILDHOOD'S REALM

"EVEN LITTLE CHILDREN"

A Story of the Sufferings, Bravery, and Patriotism of Europe's Children in War-time

THE children of the fighting nations had a large share in the war; they suffered the horrors of slavery, of starvation, of mutilation; they knew the terror and grief of fleeing from their burning homes; they saw ghastly tortures inflicted upon their own fathers and mothers, and they are the ones upon whom falls the overwhelming burden of reconstruction. For the accomplishment of this great task they early learned endurance, stern resolve, and gallant courage.

WHEN THE WAR FIRST CAME—REFUGEES

The first bitter lesson was awful terror and confusion. It all came with such appalling and unexpected swiftness. The town of Ypres was once a pleasant place to live; now there is hardly one brick standing upon another. The families that lived their simple, happy lives in that smiling town are

scattered and gone, the fathers killed or wounded; many of the mothers dead, killed by shells or by overwork; the children are being cared for in Calais and other neighboring towns.

HOW THE "WAR BABIES' CRADLE" BEGAN

When the first bombardment came an old priest took a last look at the flaming ruins of his church and little house, and began his sad journey to Calais. He had gone only a little way when he came upon a pitiful group, a young woman lying dead by the roadside and a tiny girl crouched by her side, sobbing with fright. The priest recognized little Luzanne Bughe. Her mother had been ill with pneumonia when the firing began, but had managed to pick up her little daughter and stagger out, in a blind effort to escape. She did not get far, for she was hit by a fragment of shell and killed instantly. The priest

took little Luzanne with him and continued on his way. As they went along they found many such scenes; sometimes a baby, with a piece of paper bearing its name pinned to its dress, would lie, kicking its pink heels and cooing, by the side of its dead mother.

Calais, where they took shelter. And there, under the direction of the Comtesse de Hemptinne, an orphanage was established which is called the War Babies' Cradle.

Sometimes in the districts near the front the inhabitants were not fortunate



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Refugees in Flight

The horrors of the Great War have been told many times, but actual photos of the suffering of women and children were comparatively rare. This British official photo, taken in 1918, shows the refugees getting away from the fighting area.

Once they found a small boy of ten carrying his little sister, who had been wounded. And so, with a constantly growing band of homeless, frightened, hungry children, the priest kept on his way. Late in the afternoon they arrived at a cross-road shrine, where they found three nuns praying. They were only too glad to join their fortunes with those of the priest and his children. After walking many days, suffering terribly from fatigue and hunger, they finally came to a deserted convent at

enough to escape. Chauny, a town of eleven thousand people, was mined by the enemy; there was a roar, a crash, clouds of dust, and Chauny had disappeared. Many who survived the explosion had further horrors before them for the Germans, in this case, carried off 8,000 people as slaves. The separation of families was one of the cruelest blows the Germans inflicted, and it seems quite deliberate, for in many towns they destroyed all the civilian records for that sole purpose.



Fleeing from the Horrors of War

Who knows what happened to all the little refugees of the war? Many, of course, died, but many thousands were cared for by kind people in every country. What terrible stories the survivors will be able to tell when they grow up!

"YOU CANNOT BE A GERMAN, YOU ARE SO KIND"

There were several relief organizations besides the Red Cross that did wonderful work in relieving the misery of the children; but there was very little to work with, considering how much there was to be done. The supply of milk in Belgium was only large enough to feed the children who were actually starving; those who were of normal

reunited. The children who came from the devastated portions of France were in a condition too pitiful to describe; they were like silent, broken old people; they were filthy, starving, diseased. One little girl was unable to talk. The doctor said it was from terror at the frightful things she had seen. After six weeks she whispered to the doctor, "You cannot be a German, you are so kind." When the children first came they could not bear the sight of an



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Posing for Their Pictures

The Germans photographed the inhabitants of Northern France so as to keep a record of the women and children.

weight had to wait. The various relief organizations founded many colonies for these little refugees, and by their thorough system many families have been

open fire. It recalled too vividly the sight of their homes and villages in flames. But in time, under the tender care and wise treatment they received they learned to forget the horrors they had gone through, and became healthy, normal boys and girls.

WHEN THE AMERICANS HELPED

Their gratitude was very touching, and they appreciated keenly whatever was done for them. The school-children

Monsieur the American Delegate, that you represent these generous benefactors of the refugees, that your rich and great country will relieve in France all suffering. And while your soldiers mingle their blood with ours on our beloved soil, while they combat with a bravery and élan which every one knows, they fight to reconquer our sorely tried



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Little War Orphans Fleeing from Antwerp

When the Germans began the bombardment of this Belgian city on October 10, 1914, three hundred thousand refugees, including men, women, and children, were forced to seek shelter and safety in Holland, and the parks in Rosendaal were filled with these refugees from over the border.

of Vitre in the Ile-et-Vilain delivered an address to the American Red Cross delegate when he visited them: "Monsieur the American Delegate: We are little refugees. Arrived at Vitre we have received a perfect welcome, so devoted that it has made us often forget our sorrow. The Red Cross, seconded by our generous benefactors, give always generous and constant aid. And we know,

country and to save the liberty of the world. You have arrived to help us, to bring material support, so precious for those who have lost everything, and at the same time the moral comfort of a great and sincere friendship. It is for this that we have come to greet you with all our hearts for ourselves, for our mothers, and for our fathers and big brothers who are fighting. Thanks,

Monsieur the American Delegate, thanks.

"We all wish for the honor and prosperity of your great country."

WHAT HAPPENED TO AMABILE

From Italy comes the touching story of Amabile, little more than a child herself, but the mother of three. Her husband, Beppo, was at the front and she lived at Latisanotta in the Veneto with her father and mother. She took care After they had walked for several days, Amabile's anxiety about her father, who had stayed behind to watch the little farm, became so great that she decided to go back for him. In the meantime the Austrians had advanced and the roads were full of soldiers and artillery, and enemy aviators were dropping bombs everywhere. Amabile, however, courageously kept on her way until at last she reached the little farm. There she found the house in fragments, and her father lying unconscious beside the



Children Found at Château-Thierry

These poor little sufferers were picked up by the Allied soldiers, half dead, and covered with flies.

of the three children of her sisters-in-law, who had recently died, as well as her own three. They lived in constant fear of the Austrian guns and air raids, and almost every night Amabile had to carry the children down to the cellar for safety. One day came the news of her husband's death and the order to evacuate. Amabile was so heartbroken at the loss of Beppo, whom she loved devotedly, that for herself she had no wish to escape; but there were the others to think of, so she started out with her aged mother and the six children. With the aid of an improvised harness she managed to carry the two youngest babies and a few bundles of provisions.

empty stable of the few horses and cattle he had tried to save. The old man had been merely stunned by the shell that had wrecked his home, and after frantic entreaties Amabile was at last able to induce him to leave. By great good fortune they managed to rejoin the mother and children and they continued their desperate journey to Verona, one hundred and fifty miles away. Their suffering was intense. Because of the children and the weakness of the old father and mother they had to go very slowly, and as the Austrians drew nearer and nearer, the shells fell more and more thickly about them. But Amabile never lost heart, even when

she saw the wretched refugees falling on all sides, some killed by shells or bombs, and some dying of starvation. For two weary months they wandered on, sometimes forced to ford rivers, sleeping wherever they could find shelter, eating



A Ragpicker of Salonika

whatever they could pick up, and at last, through Amabile's unfaltering courage and strength, they arrived at the Red Cross station at Verona and knew that they were safe.

LITTLE EXILES FROM ARMENIA

Terrible stories are told of the suffering of the Armenians when the whole nation was deported and forced to walk to their exile in the desert. The roads were lined with the corpses of those who had been killed or died of starvation. And the cruelty of the Turks was so savage that mothers would throw their children into the river or sell them to strangers to prevent their falling into the hands of the enemy. The children who escaped were in a pitiful state. Many had lost their parents; they had no food, no clothes, no homes, and were literally living in the streets. The relief committees had one of their biggest problems taking care of these miserable little Armenians.

YOUNG WANDERERS IN RUSSIA

A strange and tragic tale from Russia tells of wandering bands of children living like hunted animals, across the steppes and through the vast lonely forests. It began in the spring of 1918 when, because of the great scarcity of food in Petrograd and Moscow, with starvation facing them, the parents of some three thousand children, between the ages of six and sixteen, sent their young sons and daughters out into the country districts where food was more plentiful. So these children, under the care of teachers and guardians, were taken out to the farms where they were to workall they could in return for the bread that was to keep them alive. All through the summer they worked, the older ones doing everything they possibly could to make up for the little ones who could not be of much use, but after harvest-time there was nothing more for them to do, so they set out to return to the city. However, by now the Bolshevik front lay across their path, and this they dared not pass. There was nothing to do but pack into such carts as the peasants could spare and move in the opposite direction, hoping to get past the Urals where relief could be had.

Then began a journey of heartbreaking weariness. They struggled along over a desolate road, begging their food from one village and then another. As

the snow began some of the children could not keep up, and sometimes they would be taken in by peasants, but most of them had to go forward. Presently, through quarrels and dissensions among the leaders, the groups began to separate and scatter. Moreover, the terrible anxiety and the problem of trying to find food and shelter for their charges began to tell on the older people, and some of them who felt that they could get along well enough by themselves, but could not continue burdened with a lot of children, shook off their responsibility and abandoned the helpless children while they were asleep. The others, after months of hardships, traveling miles and miles over deserted frozen country, finally arrived at points near Ekaterinburg and Urbit and Ufa, from which Red Cross workers eagerly hurried out to rescue them. But the poor little ones who had been deserted—no one really knows what has happened to them. Some, after living like hunted animals for months, sleeping in deserted hovels, in empty box-cars, any place they could find protection against the wind and cold, eating roots, clothed only in rags, were rescued by relief parties; some were taken in by peasants, but a large number perished.

LIVING UNDER THE YOKE OF WAR

In the early days of the war the French countryside was thronged with refugees fleeing before the German advance, but there were many who loved their homes so much that they could not bear to leave them, and preferred to stay no matter what happened. And for these people living, some of them, only ten miles from the front, life must go on. The danger was, of course, imminent. In Nancy, only a short distance from the front, the boom of the German guns was incessant, and

sometimes there would be as many as five air raids in one day. In some of the smaller towns the inhabitants lived in constant danger of complete annihilation, and the courage with which the people lived in cellars, dugoucs, and holes was astounding. It is even more amazing to think that children could live, go to school, and play under such conditions. But they did more than that. Some of them actually took their father's place and carried on the business.

On August 1, 1914, the first day of



A Water-boy at Salonika

mobilization of the French army, Louis Raimbault, the baker of Villecerf, was told to report the next day to his regiment. He was the only baker for five miles around and a very necessary per-



Kind Women Cared for Soldiers' Children

In Berlin day-homes were established for children of soldiers who could not be properly cared for by their mothers.

son, for the French people depend greatly upon bread and they never make it at home. So during the twenty-four hours until he had to go, the baker worked without stopping, kneading, mixing and baking as large a supply as he could. He left a wife and four children, the oldest a boy of thirteen, called Louis. After the father had gone Louis begged his mother to let him take his place, but she protested, saving, "You are not strong enough." However, when the supply left by the father was almost gone, she let him try his hand at a small baking. The work was not easy. The bakeshop had to be kept very hot and the great masses of dough were very heavy and tiring to manage, but Louis had watched his father, so that he knew just what to do, and the first batch of fifty loaves was a success. And from that time on he continued doing a man's work so that five hundred people should have their bread.

FARMING FOR FRANCE

At Villemar a French soldier had bidden a sad farewell to his wife and two little girls. "If only they were boys," he thought. "How will the crops ever be harvested? Who will take care of the little farm?" But he did not realize the pluck and ability of his fourteen- and twelve-year-old daughters, for Raymonde and Jeanne immediately took hold, and with the help of a few boys and old men they managed the harvest with fine results. And the father had to acknowledge his mistake when, the next spring, they plowed, harrowed, and sowed not only their own land, but also the farm of their uncle.

SCHOOL IN WAR-TIME

It was a wonderful achievement that in the midst of the havoc of war the schools still went on. The French government made a great point of this and ordered that all unemployed children between the ages of thirteen and eighteen must go to school or an industrial class. The spirit of teacher and pupil seemed indomitable. When the boys were old enough to leave school for the army the girls would have a great ceremony and shower them with part-



The Miracle of the Barn

Two British signalers found a little French child abandoned or forgotten in the flight from the Germans in the summer of 1918. They took it with them into a barn, where they placed it, for warmth and safety, between them. In the night a German bomb from an airplane fell on the barn, killing both men, but the child was found in the morning peacefully asleep and

unharmed.

ing gifts. Poor children, they had little to give, but gay nosegays were made of leaves, and tight little rolls of paper pretended to be cigarettes. When a little girl was out of school for a few days no questions were asked. It meant that the news had come of her father's death. She would return shortly wearing brave bows of black on her hair, and say, proudly, "Now I am dressed as an Alsatian."

In Rheims, two kilometers from the enemy, M. O. Forsant, the Inspector of Schools, held a conference with the mayor and decided to establish schools



Education Under Difficulties

in the deep champagne-cellars of the city. Sixteen were founded in various localities, so that the children would not have farther to go than was necessary. These cellars were sometimes four stories deep and there the children were safe from shells and bombs. The third cellar was used for the playground

and the fourth was the school-room. They were well ventilated and lighted by oil-lamps, for since the invasion there had been no electricity or gas. The children soon became used to the idea. and after a few weeks felt quite at home in their underground schools. The teachers did all they could to make them cheerful, and gay flags and stirring war pictures covered the walls. These schools continued for thirty months and were attended by four hundred and ninety-eight children.

In Italy sixteen thousand children went to school under the Italian flag, in land that the Italian soldiers had wrested from the Austrians. Following the soldier came the schoolmaster, and in Trentino school-houses have been built, or improvised from barracks. These schools were all situated with an eve to air-craft dangers, and were placed near cellars and dugouts. Some were inclosed in walls of sand-bags for protection against the explosion of shells and enemy fire generally, for they were practically on the front. The children realized their danger and were proud of it. They felt that they were helping chase away the "old hen" as they called the double-headed Hapsburg eagle. Often when they were scurrying for shelter from the attacks of Austrian airmen, they broke forth spontaneously into the Garibaldi hymn.

As the war was ever before them in their work and study, so it was with the children's play. We are told of an enormous increase in the manufacture of toy soldiers and war games. The little French girls were all Red Cross nurses, all the little boys were soldiers, making machine guns out of old pieces of stovepipe and echoing the thought of one little boy who said, "I wish I could play war with real little Boches." But it was hard to find a playfellow who was accommodating enough to want to be the German.

X1--5

RUNNING AWAY TO WAR

In Belgium, after their fathers, and uncles, and big brothers had gone to the front, the boys of fourteen and fifteen determined to follow them. Their only path of escape lay across the frontier between Belgium and Holland, which was heavily guarded by wire entanglements, barbed and charged with powerful currents of electricity; deep

on their way to the frontier. They walked swiftly and silently until noon, when they stopped to rest, hiding in the shadow of a ruined church. They could hardly contain their rage when they overheard some German soldiers admiring their work of destruction. They continued their way, going in single file, bent almost double. A terrific rainstorm had made the way more difficult, with deep mud to slip in, and



Courtesy of American Red Cross

Refugee Children of Italy

A group of older refugee children learning the history of America and Italy, in the Hotel Victoria, on the Naples sea front.

ditches filled with water; and many German sentries, armed to the teeth. But from time to time, in spite of these obstacles, little groups of four or six boys would escape into Holland, and hurry from there to England and then to France, where they could join the Belgian forces. One morning at dawn a little band of six determined boys, led by a delicate-looking blond lad of fifteen, crept stealthily away from home

they expected to be found by a sentry at any time. In that case they had decided to speak Flemish and to say that they were looking for work on a nearby farm.

Late at night they arrived at a farm where they were gladly welcomed. And there they rested, and dried their clothes. Early next morning they were on their way, but they found that the storm had caused the river to rise. Four of them could not swim, so they had to build a raft. This was not easy, since the rain had started once more and they had no tools to work with. They managed, however, to bind some logs



A Boy Hero of Italy

together and, in spite of a swift and treacherous current, they got across, and, after four hours of marching, came to the end of the first lap of their journey. There they rested two days before going on, and then, deciding to die rather than turn back, they started again. Making a long détour to avoid German barracks, they came to the home of their guide, whose mother welcomed them joyfully and spread before them a bountiful dinner, after which she bade them good-by with a "Courage, my children. Kill as many as you can!" Shortly afterward they were stopped by a German soldier, and two of their little band, not so fleet as the rest, were captured. By night they gained a house near the frontier, where a German officer was

> quartered. As he was away on furlough, the boys made themselves at home, slept comfortably, ate plentifully of all the pantry offered, and, slipping away at dawn, left a polite note

of gratitude.

They now had to proceed with even greater caution. German sentries seemed to spring out of the earth. One tried to stop them, but they knocked him down and escaped. They came to a deep ditch filled with water up to their shoulders, where they stood motionless for two hours, while they could hear the Germans shooting at another group of Belgian boys like themselves. Finally they made a rush for it, and scrambled up the slimy side of the ditch and squirmed through the heavy wire entanglements at the top, which miraculously were not charged, and, with German bullets whistling about their heads, escaped once more. They had come by now to a

river along whose bank a path had been made of boards. But the first boy who stepped on it was blown to pieces by a bomb concealed beneath it, and the force of the explosion threw another boy into the river. He was drowned. So of the original six only two were left. But with unfaltering courage and daring these boys kept on and soon found themselves on Dutch soil. There, boldly brandishing aloft clenched fists, they shouted defiance at their enemy, "Assassins, you shall pay. Vive le Roi! Vive la Belgique!"

SIDE BY SIDE WITH THE POILUS

There are many stories of the bravery of children of France who fought side by side with the poilus. Prudent Marius at fourteen was a *sergent-fourrier* (quartermaster sergeant) in the French army. He was born at Dijon, the son of a

regretfully retired to a hospital. Next we hear of him at Momoux where the Germans were retreating, and, believing themselves safe for a few hours, they prepared to take some much-needed sleep. An officer went up to a haystack to get some hay for a bed, and dropped dead, for Marius had been hiding in



Courtesy of American Red Cross

A School Under the Earth

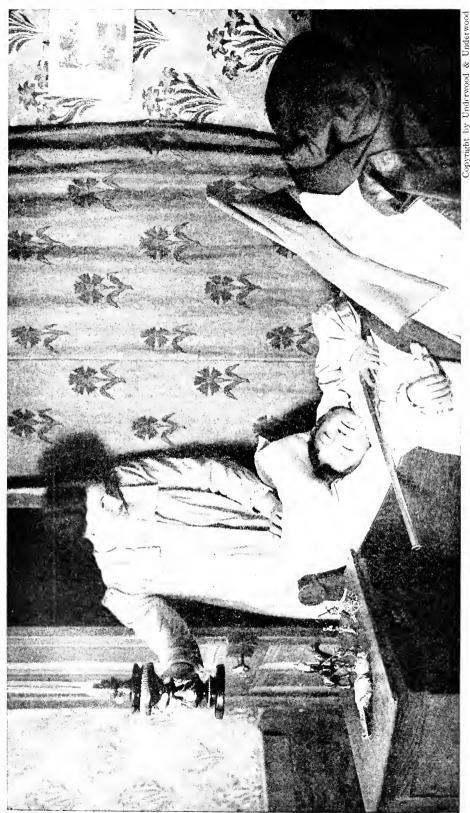
School for Venetian children of the American Red Cross built in a subterranean cave to protect them from airplane bombardment.

workman, and since his father and mother were both dead, there was no one to quell his ambitions to become a soldier. When the war broke out he became a cyclist-scout and was taken to Lunéville. Here he acted as ammunition-bearer, despatch-carrier, scout. He was, in short, ready for any task that might be given him. He was wounded slightly, on the sixth day of the war, and

that very spot. The infuriated Germans fired on the stack, but the boy escaped. Marius was wounded again, near Soissons, but recovered and is now a hardened veteran.

"THE LITTLE SERGEANT"

Mr. Fortier Jones, who was working with a British relief organization in



The Little Soldier Sleeps on His Arms

What is he dreaming of? his mother wonders as she leans over her little son's bedside. Perhaps it is of a royal battle in which he is shooting the little gun he clutches in one hand, of a prisoner he is capturing with the other, and of the glorious banner he is following, right alongside his father—"Vive la France."

northern Serbia when the Austro-German invasion took place, gives the following account of a little Serbian soldier.

"It was at the Mladenovats railway station, late one rainy afternoon in the early days of the great retreat, that we made the acquaintance of the 'Little return to their regiments at once. His home was three days' walk from Valjevo, the nearest railway point, and he had walked the whole way alone; but he was late, and was afraid of exceeding the time allowed for soldiers to return. He said if he reached his station too late he 'would be shot as a deserter, and



The Little Sergeant

The youngest officer, as well as the youngest soldier, in the Serbian Army.

Sergeant,' the youngest officer, as well as the youngest soldier, in the Serbian Army.

"He is—or now, perhaps, was—a real sergeant. On his diminutive soldier's coat he wore three gold stars, and in lieu of a sword he carried an Austrian bayonet, and in lieu of a rifle a Russian cavalry carbine. A full-sized, well-filled cartridge-belt was slung over his shoulders, because it would easily have encircled his baby waist three times. He was ten years old, and had been in the service for 'a long time.' He had asked and obtained a leave to go home just before all the trouble began, and now he was answering the hurried summons sent out to all soldiers on leave to

rightly so.' Then his regiment 'would be disgraced.' He had no money, but did not need any. At the military stations he demanded his loaf of bread as a *Serbski vernik*, and got it. As for sleeping, well, any café-owner would not refuse a Serbian soldier the hospitality of his floor.

"Our train was due to leave at seven that evening, but it showed no signs of departing, so we took the 'Little Sergeant' into town and gave him dinner at the hotel. He ate tremendously, but seriously, preoccupied, as a man would have been, and at times discussing military affairs. Despite all his efforts, we detected a slight limp, and found his small feet in a frightful condition. His



Courtesy of American Red Cross

Selling Wood in Serbia

Wood was so scarce in Serbia during the war that in many places it was sold by weight.

opanki had not fitted well and were nearly worn out. He had very bad blisters and stone - bruises. To his boundless, but unexpressed, delight, we were able to give him a new pair.

HIS FATHER HAD TO SALUTE HIM

"Every one plied him with questions, which he answered slowly, taking great care as to his words. Whom had he left at home? Why, his mother and little sister, who was five years older than himself. His father and brother were in the army. When he went home on leave he was able to cut wood and bring water, see to the prune-trees and feed the pigs; but most of the time the women had to do this, which was very bad. But what could one do? His country was at war, and that meant that men must fight. Soon, though,

when his own regiment, with which none other could compare, had administered a much-needed thrashing to the Suabas, he would return home and help build up the farm. Yes, his father was a soldier of the line in his regiment, the bravest man in the regiment. He himself had shot well, and had been cautious in the trenches, and so had been promoted above his father, who now, according to military discipline, had to salute his son. But he never allowed this; he always forestalled his father, and at the same time conserved discipline by seizing the hand that would have saluted and kissing it. His regiment was somewhere near Semendria, but exactly where he did not care to say, because there were spies all aboutthis with a wary glance at me.

"As we waited in the smoky little station, crowded with refugees, he stood

as straight as an arrow before the seated ladies of our party, refusing a seat. He was a Serbski vernik with a party of civilians who had been kind to him, and while men of that party had to stand, he would not sit. Blisters and bruises might go whence they came, to the devil. But as it grew late, an enemy he could not conquer attacked him. He had risen at four that morning, and it was now ten at night. With the tactfulness born of long years of diplomatic life in European capitals, Mme. Christitch quickly made room on the bench beside her, which a moment later the 'Little Sergeant' unconsciously filled. Almost at once his head sank to her lap, his hands sought hers, and a last, convincing, incontestable proof that he was a real *Serbski vernik* was given: a snore, loud, resonant, manly, broke on the watching crowd.

"Two hours later, when our train whistled, I gathered up a sergeant of the Serbian Army, carbine, ammunition, sword, knapsack, and all, and carried him without resistance to the freight-truck in which we were to travel, and laid him, covered with my blankets, on a soft bale of clothing. I hope that if ever in the distant future I shall so hold a boy more closely akin to me, I



Courtesy of American Red Cross

Little Ragged Serbians

Clothes do not make the man, but clean and decent duds will make him a better citizen. With this in mind, the American Red Cross conducted a nation-wide collection of clothing, shoes, and blankets for the helpless civilians in the devastated countries.

can be as proud of my burden as I was that night. Shortly before our ways parted next day we asked him if he was not afraid to go back to the trenches.

"'A man does not die a hundred

times,' he replied, quietly.

"I almost find myself hoping that in the horrible carnage which occurred at



Jean Passard

An eight-year-old French orphan boy adopted by a regiment of American Engineers, who dressed him in the American uniform and raised \$1,000 for his education.

Semendria a few days later a bullet found the 'Little Sergeant' after some momentary victory, some gallant charge of his beloved regiment. Life had been so simple for him! His country was at war; she could not be wrong; all true men must fight. And he had known her only in glorious victory.

"'Sbogum, Americanske braat' ('Goodby, American brother'), he murmured when we separated."

HELPING THE WAR LOANS

At the time of the Second War Loan France made an appeal to the schoolchildren, and the enthusiasm and heroic self-denial of their response was thrilling. A Parisian boy of twelve helped swell the pitiful family resources of forty-five sous a day, which his mother earned by cleaning and scrubbing, by working for a baker from five to eight every morning before going to school. For this he received each week five francs, which he promptly gave to his mother, receiving from her ten sous every Sunday for spending-money. For several months he saved all those sous and contributed them in school toward the War Loan.

The following letter was sent with two gold pieces to a bank director, for the War Loan:

M. Director of the Bank:

It is with great pleasure that my sisters and I have broken open our little joint money-box, for I must tell you that we thought very much of it, especially since the beginning of the war, for this money reminds us of a great event. When our father went away on the second day of the mobilization he went with great courage, but we shed many tears on seeing him go, our dear papa. To give us a little courage, he put into our money-box, where there was nothing very much, a gold twenty-franc piece and another of ten francs, telling us to keep them as a souvenir of him.

Really, I assure you my sisters and I were glad to see these pretty coins again, and in spite of all the pleasure we should have felt to keep them, we send them to you, for we know now that gold is the main sinew of war, and that the more gold we have the more shells we shall buy to drive away the savage Boches who have come to kill our fathers and brothers. We hope you

will accept these two coins, for our father will certainly be very pleased with our action.

Long live France and her Allies, and may Victory soon come!

Three little French girls,
Pauline, Esther, Gabrielle.

THE "REPATRIÉS"

The *repatriés* were the people, the old men and women, a few young women, helplessly broken, and the children, that Germany no longer wanted

four and thirteen years old, and not an older person among them. They arrived at Évian early in the morning after three days' weary traveling, and here they received a stirring welcome. All the town turned out to greet them, the band playing, the people cheering. The little children, just freed from three years of slavery, motherless, homeless, diseased, starving, poured from the trains, victorious in spite of everything, shouting: "Vive la France! Vive la Belgique!" It was more than one could



Repatriated French Children at Evian-les-Bains

Think of the big trip these tots had to make after having left their homes, and often losing father and mother. At last they are in good hands again.

to feed, and so sent them out of the country. They came pouring through Switzerland, into France, sometimes as many as a thousand daily. On October 15, 1917, the first of the children arrived. Five hundred of them! Little Belgian boys and girls, between

bear; the relief workers, hardened by the heartbreaking sights of three years, broke down and wept.

They were taken to the casino, where there was more music, and an address of welcome by the mayor. Each child was given a bright new franc, two flags,



In a Cool Cellar

In Rheims and several other beleaguered French cities the schools were conducted entirely underground, in great cellars, and a great deal of the business of the administration of the city was similarly transacted belowground. In London a new use for the subways was found during the air raids.

Belgian and French, and a good dinner. After they had sung the "Marseillaise" and the "Brabaçonne," which even the tiniest knew perfectly, they shouted gleefully a bitter song against the Germans, learned secretly, and then they were turned over to the doctors and nurses for baths and examinations before being put to sleep.

AMERICA AND THE CHILDREN OF EUROPE

Whatever Europe thought of our neutrality before America entered the war, she had only gratitude for the millions of dollars, the food, and clothing that were sent with such generosity through the various relief organizations. The children were grateful, too, as we can see from innumerable letters like the following, which comes from the children of Anguillara, Italy:

DEAREST AMERICAN BROTHERS AND SISTERS:

You are little same as we in age also in stature, but great of mind and of heart, you have thought and think of us and you have willingly deprived yourselves of your little savings to come to our help, knowing that our fathers have a long time been fighting at the front and therefore cannot earn and provide as in time of peace for all our little needs, and you have taken in part their place.

Then you love us! And we love you, accepting with pleasure your gifts, and we thank you from the bottom of our hearts.

We that write you are children of the town of Anguillara Sabazia, province of Rome, and in number we are two hundred and fifteen, tasting every day your salutation in hot soup. Again we thank you little generous ones, and your fathers in the beneficent Red Cross, and the officers and the kind ladies that represent it.

Your Little Italian Brothers and Sisters.

Very touching are the brave little letters that come from the French orphans and fatherless children to their American godparents. Here are a few representative ones:

I am a very little boy, I am not quite eight, and I am neither broad nor tall, nor do I know very much. But I am going to try hard to express my gratitude. Poor mamma is so happy that some one is helping her, for she is not very well and we miss dear papa very much. He was killed the twelfth of November, 1914, at Fontenoy after having fought well. He was a farmer before the war and we were very happy, for we loved each other very much. I have a good many uncles at the front. The brother of mamma is at home on leave now and he has the Croix de Guerre and I am very proud of him.

Felix.

DEAR GODMOTHER:

A few days ago the postman handed us the quarterly money-order from you, and the very next day he gave us a great big envelope with a long letter from our dear godmother, which made us very happy. We do not know how to put our gratitude to you into words. A "thank you" seems very cold and poor return for all your goodness to us. What can we do to prove to you that our hearts are full of gratitude, of admiration, and of affection for our wonderful American godmother? We are having our holidays from school now, but we are doing our holiday tasks with great care, so as to get good standing when the school year begins again; we do not want to fall back in our lessons. Well, dear godmother, I finish my letter with this promise to you: we will do our utmost never to do anything that would prevent our dear papa from being proud of his two little sons. Please accept from your two little godsons, with their deepest respect, their most loving thoughts and good wishes for you.

Your war godsons, Alcide and Joseph.

DEAR GODMOTHER:

How can I tell you what your help means to us! We are four children, I am the eldest and am ten, and I try to help my mother,



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French Children Made Homeless by the Germans

Before the statue of Christ these poor little orphans offered prayers of thanksgiving on Christmas

Day for their deliverance from the German armies.

but I am not big or strong enough yet to take my papa's place, though I try all I can. We go to school, for we must learn to read and write, for our papa would wish that, and after lessons are over we do what we can to help our mamma, who is not well since papa died; she cried too much, I think. I and my little brother go out and pick up sticks for the fire, and my next sister minds the baby, Pierrot, who is such a darling, funny little chap,

We send our love, and when we are able to afford it I will send our photo.

Your little godson, IEAN BARDOU.

"SAMMY" AND PIERRE

One of the most striking things that was invariably commented upon by any one who saw the A. E. F. in France was the devoted intimacy between our



Courtesy of American Red Cross

Clutching Their Treasures

After more than two years of misery the children could scarcely realize that these playthings were meant for them, and clung to the toys as though their lives depended upon them.

and who makes us all laugh with his tricks. Before papa was killed at Verdun we lived very happily and comfortably, but now we are in great need, for it takes money to feed four children, and then we require clothes and shoes. If only I were big and able to earn a lot of money! I will some day, and then my mamma will not cry so much. She says, "May the good God return to you many times what you are doing for us."

soldiers and the French children. Heywood Broun in a despatch to the New York *Tribune* said: "These French youngsters are forever in among the feet of the soldiers. They sit around open-eyed during mess-time, and they are open-mouthed, too, but not in vain. They trail the men on the march. Little boys and girls drive fagged soldiers of Uncle Sam in mad pick-a-back gallops up and down village streets, and clap their hands at American songs. Boys along the road always salute passing officers, and the American army has made it a rule that, though it come from a child of two, every French salute shall be returned with proper dignity and

gravity."

In French towns where Americans were quartered money was constantly coming in for "the kids" and the soldiers would give them countless parties. The Stars and Stripes, the A. E. F.'s newspaper, decided to organize that feeling. and so started a movement among various army units of adopting some of their little playmates. The idea was received with great enthusiasm, and in ten days twenty children were adopted. It was to be done through the Red Cross, who furnished the child and received the money to take care of it. One morning a brief letter was received: "Company G met Easter morning. We want to adopt a little boy of six with blue eyes, the son of a man who fell at Verdun." Small Henri tallied with all the requirements, and when Company G learned that he had two brothers and sisters, they promptly wrote back, "Company G takes the whole bunch." The Stars and Stripes received this letter from their little girl:

My Dear Parrains:

I am quite a little girl who does not know how to write, but just the same I want to say a big Thank You. Here is a great big kiss for all of you from your *filleule*, a little French girl,

MARIE LOUISE PATRIARCHE.

What the children themselves thought of our boys may be gathered from these compositions written by the pupils of a French school, in a village where a number of American soldiers were stationed: They are all fine men, tall, large shoulders. I know one, a big fellow. He has a scar on his right cheek, which was made by a horse-kick. He has a rosy face, long hair, carefully arranged. His feet are small for his size. He has a sweet tooth. He is gay. He is good. He eats chocolate and sweets. One day when I was going on an errand near their camp I met him sharing his chocolate with his comrades. Next Sunday I was playing at spinning-top with my comrades. He was looking at us. My small brother had no spinning-top. He gave him two cents to buy one.

The Americans are polite. When they shake hands, they bow down their head a little. Before entering a house they take off their hats, and wait till they are told

"sit down."

They have good discipline; no fault is left unpunished. They are more daring than we are; they do not fear expense.

JEAN LABERIOTE.

I know one more particularly. He is of ordinary size. He has a fine face, round cheeks, blue eyes. He likes to laugh at others. He is intelligent. He has got the bad habit of smoking and chewing tobacco. He is fond of sweets. He bathes very often.

The Americans have been very good to France, to come to help her to fight the Germans.

Jean Gaits.

The Americans are generally very clean and very polite. They also like sweets. They are always eating chocolate and sweets. There are some who like raw eggs mixed with chocolate and milk, or with beer. They do not cut their bread as we do. They put it on the table and cut it as with a saw. Every morning they wash thoroughly. They wash their teeth after all meals. They have leather gloves to work. They smoke and like alcohol.

The Americans came to France not for their own interest, but in order to help us. And so we have affection for them. They have at the front one million men who will inflict great casualties on the Boches; meanwhile more yet come to join them by the

sides of the English and French.

FRANCIS LOUPIEN.



A Winner of Hearts and Battles

American soldier boys became big brothers to little French children, in whose presence they became young again, and acted like boys instead of gallant fighting-men.

The one that I know is tall, well built. He is very amiable and kind to children. Whenever he meets one on the road, he will stop his horses and take him along. He is a horse-driver. When it is raining he does not care, he will then whistle with all his might.

ERNESTINE CABANNES.

The work of the Americans is certainly a curious one. I saw them raise huge logs with large pliers, as eacily as they would have moved a straw. Their furnaces for their kitchens are half in the ground, in order not to waste any heat. What struck me especially about the American soldiers is their cleanliness. All of them are tall, healthy, and strong, owing to their hygiene. Their teeth are very white; and not to soil their hands, they put on gloves, even at work.

Another thing I admired also is their politeness. France had the fame of being the most polite nation in the world. We have often heard and read about the French courtesy. Is France going to lose her rank among the well-bred nations?

I like the American soldiers who came to help France. I like the Americans who came here to defend justice and right. I admire the Americans who remembered France, and who came to her in spite of the many dangers.

Long live the United States of America!
Renée Bourthe.

Here are a few opinions written by English children of the same ages, and although they did not have the opportunity of the French children to know the Americans, their impressions seem to be very favorable:

The Americans, or Yanks, as they are called, are very tall men, mostly all over five feet six inches. There are hardly any under five feet six inches except the men from Washington and about there, and they are rather small. Most of the officers have two gold teeth, one each side of their mouth, and they all have plenty of money, or seem to. They are always eating, officers and men alike, and you often see

them strolling along the street eating gooseberries, strawberries, oranges, bananas, cakes, and so on. They march by our house almost all day with their towels when they go bathing, and when they go for a long march they are armed with rifles. bayonets, pistols, and a kind of wooden club. The American officers do not say left, right, left, right, when they are marching, but one, two, three, four, one, two, three, four. They are very liberal with their money, for they very often give pennies to the children. They like going out in the evening with young girls. They have done a lot to help us in this great war, and a lot to hinder the Germans, and with their help I hope the war will be soon over, and victory for the Allies. They are over a half-million over at the front now and the Germans now know that they can fight when they think they will.

STANLEY C. BUTTS (11 years).

The Yanks are American soldiers. They have only lately joined the war, and they joined in to give liberty to all the nations. Their chief game is baseball and they can play with skill, and can catch, bat, and throw the ball quite nicely. They can also run rapidly without hurting themselves, which shows they are strong men and they are big built. They have no King, but a President, who is changed every four years. Their President at this time is called President Wilson. The first ship that sailed from America to England loaded with American troops was greeted immensely by the English, for the fear was a lot greater then than now of U-boats. The Americans are doing us great service in France as well as exporting food to our country.

D. M. REATH (12 years).

A LITTLE RIVER AND A GREAT OCEAN

The children of Europe are offering us a precious gift, and it must be our happy task to tenderly cherish and guard this young friendship, the fore-runner of a new love and sympathy to be established between the nations. In the letter of fourteen-year-old Odette Gastinel this friendship finds an exquisite



Safe with the "Greatest Mother"

An American soldier makes friends with a baby while accompanying a Red Cross nurse in the poorer quarter of Marseilles.

expression: "It was only a little river, almost a brook; it was called the Yser. One could talk from one side to the other without raising one's voice, and the birds could fly over it with one sweep of their wings. And on the two banks there were millions of men, the one turned to the other, eye to eye. But the distance which separated them was greater than the stars in the sky;

it was the distance which separates right from injustice.

"The ocean is so vast that the seagulls do not dare to cross it. During seven days and nights the great steamships of America, going at full speed, drive through the deep waters before the lighthouses of France come into view; but from the one side to the other hearts are touching."

BELGIUM, 19181

By Sherril Schell

Over the fields, over the dune,
Comes a sound of carillon pealing,
As it set the birds a-wheeling
Long ago with its tune.
Faint at first, now strong, now clear—
Over the world it comes a-winging,
And, oh! it is the children singing—
The children singing as they dance,
The day of their deliverance.

SAVING THE BABIES

How Children of Europe Were Made Well and Taught to Keep Well

By Elizabeth Burr Thelberg, M.D.

Vassar College

THE work for children during the Great War could be, like all Gaul, divided into three parts: first, the work done by various agencies for children in the devastated countries of Europe; second, work done by the Red Cross for children in the countries at war; and third, work done among the children of America whereby their patriotism was aroused and their aid enlisted for their unhappy little brothers and sisters on the other side of the Atlantic.

"FOR THE FATHERLESS CHILDREN OF FRANCE"

Comparatively early in the war this society was formed in France by some of the most responsible men of the French Republic. France recognized early that the war would leave at least three hundred thousand orphan children for whom provision must be made in order to secure the survival of the French nation. Two Englishwomen,

¹ From The New York Evening Post.

Miss Scofield and Miss Fells, came to America to interest us in the claims of these children, and secured an American committee of very eminent persons, among whom were Colonel Roosevelt, Joseph H. Choate, and Myron T. Herrick, our former ambassador to France. I. P. Morgan & Company took charge of the funds of the society. The French government made an appropriation for each little half-orphan, and it was estimated that an additional ten cents a day would guarantee the education and proper care of a child. For \$36.50 a year, therefore, one could "buy" a French child or baby. In many instances, children or grown people clubbed together, two paying each for half a baby, four for a quarter of one, and so on. Close personal touch was possible, as the committee agreed to give to those who wished it the name and address of an orphan child. The persons paying the money were called godmothers and godfathers, and many charming and interesting friendships are in existence at the present time through the operation of this plan. Photographs were exchanged, and children themselves wrote, as well as received letters and gifts.

The work of the Franco-American Committee for the Protection of Children of the Frontier was carried on almost wholly by a group of Americans in Paris, Mrs. Cooper Hewitt being honorary president. With this committee the order of St. Vincent de Paul coöperated very effectively, opening many of its Paris institutions as temporary shelters. Ten colonies of these children were eventually formed in Normandy and Touraine, and nearer Paris.

A very large sum of money was raised, and much interest excited, by the Babies' Fund promoted by Life.

An association "for the protection of the families of soldiers who died for their country" was formed by Madame Waddington and Mrs. Otis A. Mygatt.

The Fund for the French Wounded, the Junior Mayfair Society, and many others did a vast amount of important and beneficial work for the little children of France, Belgium, and Serbia—



Courtesy of American Red Cross

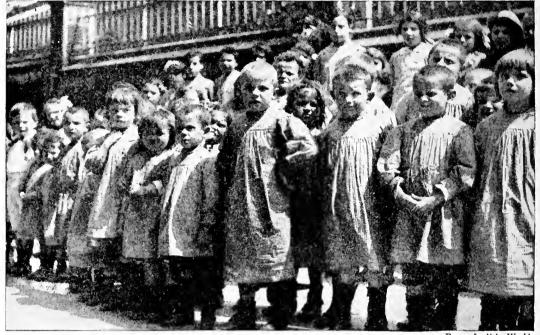
Enjoying His Daily Bath A Red Cross nurse bathing a Belgian baby.

less for the Polish children, because their country was so surrounded by the lands of the enemy that they were very difficult of access.

THE GREATEST MOTHER

Many of these societies founded for the relief of children were eventually merged in the American Red Cross, which established on August 13, 1917, its Children's Bureau, under direction of Dr. William Palmer Lucas, of San Francisco. It would take a book bigger than this one to begin to tell you all the interesting and wonderful things which have been accomplished by this bureau. The drawings by French artists which are reproduced here for you were made for the bureau, and you must remember that the few things I am able to tell you about it are just samples and items of its activities, for it would be impossible in this short article to tell you all, or more than a tiny fraction, of what it has done. Just before the bureau was

for, not hundreds, but thousands. Not satisfied with local dispensaries, the department soon established traveling dispensaries—that is, they fitted up automobiles with medical and surgical supplies, and these cars, carrying a doctor and one or two nurses, visited many different towns every week, holding clinics, or office hours, in factories, in



From Leslie's Weekly

France Aids the Belgians

These poor Belgian children were taken right from school when the Germans came, but the French let them go to school in Paris, so that they did not fall far behind.

founded, in July, a refuge for children who had been driven from the dangerous districts near the front had been opened by the French authorities, in coöperation with the American Red Cross, near Toul. This was taken over and converted into a hospital by the Children's Bureau working with the American Fund for French Wounded. It cared for hundreds and hundreds of patients, and its dispensary service—that is, an office to which children could come daily for treatment—cared

schools, and in town halls. Many thousands of children were reached and helped in this way.

FINDING LIFE AGAIN

One of the most interesting and important stations of the Children's Bureau was at Evian. This is the place from which cheap and good bottled water has been sent for many years all over Europe. Many of you have had it to drink when visiting towns in Europe

where the local water was unsafe. At Evian all the little repatriated children arriving through Switzerland from those parts of France and Belgium held by the Germans were examined by Red Cross doctors and nurses. Their fathers, often their mothers and older brothers and



A Tiny Refugee in France

A confidential chat between an American Red Cross worker and a little victim of the Great War.

sisters, had nearly all been captured or killed, and these poor little creatures, starved, ragged, bewildered, and friendless, found at the Children's Bureau love and life and care again. During one month alone 5,329 were examined and cared for. Among these children scarlet fever, diphtheria, whoopingcough, and other contagious diseases occurred so frequently that the bureau was obliged to open a hospital where arrivals bound for other parts of France could be isolated during the incubation period of contagious diseases. The bureau also found among these children so many having tuberculosis of the glands and of the joints that it granted money to an institution near the Mediterranean Sea to which these children could be sent for care.

The Belgian government, in connection with the American Red Cross,



Protect Your Mouth When You Sneeze

established a refuge for a thousand Belgian children, under the Children's Bureau, and in connection with it a dispensary with a nose and throat specialist and dentist and four nurses.

In Paris, physicians of the Children's Bureau held clinics for children three days a week in the dispensary of the



Bathe Often

Rockefeller Commission, also at a Red Cross refugee dispensary, and in four other places semi-weekly clinics for mothers and babies. The Children's Bureau coöperated constantly with the Commission for the Prevention of Tuberculosis. The activities of the American Society for the Relief of the French



Keep Your Fingers Out of Your Mouth

War Orphans were assumed by the American Red Cross in October, 1917, the original plans of the institution being continued.

TREATING TEETH

The Children's Bureau did a very great deal of dental work, which was found to be greatly needed by almost every child, their teeth having been



Sleep by Yourself



Be Out of Doors All You Can

universally neglected. Perhaps some of you may have seen a film picture showing a crowd of children swarming



Sleep With Your Window Open

around an American traveling dentist and his automobile, each child apparently desiring nothing on earth so much as to have a tooth filled or taken out.

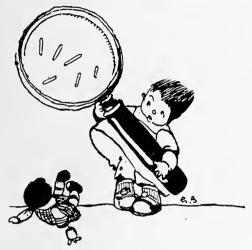


The Horrid Fly Carries Germs

Nose and throat specialists also were in great demand at all clinics and hospitals. Much ill health is the result of neglected tonsils and adenoids, and these little French refugees were sorely in need of their removal.

HYGIENE VIA MOVIES

The Children's Bureau also instituted an educational campaign. A moving-



Be Careful of Microbes

picture film on the correct care of the baby, illustrated pamphlets about child hygiene, posters, and postal cards were prepared. Many traveling exhibits, accompanied by lecturers with these out-



fits, made tours throughout the departments of France, and conferences were held with the leaders of French national

organizations having for their aim the lowering of the excessively high death rate among infants and children. Much



Don't Be Afraid of the Doctor

work for mothers and children has been done by the "American Women's Hospitals" in France and Serbia, under women physicians.



Down With Alcohol

In spite of all these and many, many other efforts which we haven't time to speak of, Dr. Vernon Kellogg, who has recently returned from a tour of Europe for the American Relief Administration, says: "The saddest sight in Europe

to-day is that of the children of eight and ten and twelve years of age who look and act like children of four and six and eight. They have been underfed for four years. Many are war



Don't Spit on the Ground

orphans. The parents of many more are absolutely destitute. Lack of food has weakened them and has retarded their growth and development. Their feeble voices cry to the world for help." Herbert C. Hoover, Director-General of the American Relief Administration, set aside from the \$100,000,000 appropriated by the United States Congress for relief work, \$2,000,000 to be expended for these children. A special Children's Relief Bureau has been established, and with this money, added to by grants from the governments of the stricken countries and by gifts from private charity, the Children's Bureau is trying to furnish free food to the destitute and half-starved infants and children of the newly liberated peoples of Europe. Much more money is needed than is now available, and to keep this relief-purse full is one of the ambitions of the

JUNIOR AMERICAN RED CROSS

The work done by American children was, in the early days of the war, various and scattered. Probably the children who read this will perhaps have been



Breathe Fresh Air

members of the Junior Mayfair, of the big Red Cross itself, and of many other local societies to help the suffering

children of Europe. When America entered the war, however, the schoolchildren of our country almost universally united in the formation of the Iunior Red Cross of America, an organization which was the work of Dr. Henry

The work the children have done was assigned by school grades, from winding varn in the primaries to making substantial and handsome furniture, packing-boxes, toys, etc., in the grammar and high schools. Even foundry and



Courtesy of American Red Cross

Children Refugees of France

Not too young to take their setting-up exercises at the Sanatorium of La Jonchère, one of the colonies established by the Comité Franco-Américain pour la Protection des Enfants des Frontières, which with the aid of the American Red Cross provided a home and education for about fifteen hundred children during the war.

Noble MacCracken, president of Vassar College, and which, after its beginning, was extended with remarkable celerity and efficiency until it comprised ten million school-children of the United States. This organization has not lapsed with the conclusion of the war, but will be a permanent factor in the education of American children, and will maintain and further love of their country and the feeling of obligation and loyalty to her. The pledge and slogan of the society is: "Make! Save! Give!"

forge work was done by the older boys. Knitting, sewing, cooking, canning, flagmaking, selling Thrift Stamps and extending Liberty Loans, first-aid and nursing classes—there is no end to the variety and usefulness of the patriotic work stimulated in the children of America by the Junior Red Cross. Flags were presented, with patriotic exercises, to the schools, and the children were greatly delighted to wear the simple, home-made, but very effective caps with the insignia of the Red



Many Had Fathers at the Front

Italian children in London holding a street demonstration. These babies were filled with patriotism, but knew only too well what it meant to have their fathers go off to war.

Cross which many of you doubtless possess and wear. Savings were effected by collections of almost everything, which children know so well how to make, from tin-foil to rubber tires.

SOUTHERN COUSINS

I have spoken in an earlier part of this paper chiefly of relief to French and Belgian children, but the Junior Red Cross is also, and very parcicularly, interested in the little Greeks and Armenians, Poles and Serbians, so innocent, so neglected, and so hungry! The children of America will earn and give at least a half-million dollars a year, so long as it may be necessary, to support projects for carrying relief to the suffering children of foreign lands. This relief work will be carried on through Red Cross commissions as they are extended, and later through organizations in the countries in which the work is to be done.

The Junior Red Cross is also launching a great health crusade here at home. This crusade is to have squires, crusaders, and knights, each with its appropriate badges. Close cooperation is to be maintained with the big American Red Cross, with the National Tuberculosis Association, with the Committee of National Defense, and with the United States Public Health Service. Wise direction is assured, and this part of their work should be of tremendous benefit to this and to coming generations of school-children; for you children in the schools to-day are the ones who are going to see to it that peace is assured, that true liberty is maintained here at home, and secured for children of other lands. Not only the ten million existing members, but the twentythree million of school-children throughout America reach out young hands to catch the torch lighted in Flanders fields.

"Be yours to bear it high!"

FIVE SOULS¹

By W. N. EWER

FIRST SOUL

I WAS a peasant of the Polish plain;
I left my plow because the message ran:
Russia in danger needed every man
To save her from the Teuton; and was slain.
I gave my life for freedom—this I know,
For those who bade me fight had told me so.

SECOND SOUL

I was a Tyrolese, a mountaineer;
I gladly left my mountain home to fight
Against the brutal, treacherous Muscovite;
And died in Poland on a Cossack spear.
I gave my life for freedom—this I know,
For those who bade me fight had told me so.

THIRD SOUL

I worked in Lyons at my weaver's loom, When suddenly the Prussian despot hurled His felon blow at France and at the world; Then I went forth to Belgium and my doom. I gave my life for freedom—this I know, For those who bade me fight had told me so.

FOURTH SOUL

I owned a vineyard by the wooded Main,
Until the fatherland, begirt by foes
Lusting her downfall, called me, and I rose
Swift to the call—and died in fair Lorraine.
I gave my life for freedom—this I know,
For those who bade me fight had told me so.

FIFTH SOUL

I worked in a great shipyard by the Clyde;
There came a sudden word of wars declared,
Of Belgium, peaceful, helpless, unprepared,
Asking our aid; I joined the ranks, and died.
I gave my life for freedom—this I know,
For those who hade me fight had told me so.

¹ From The Nation, London.

A PEACE ARMY IN WAR-TIME

"Be Prepared," the Motto of the Boy Scouts, and How Scouts Everywhere Lived Up to It

LONG before the United States entered the World War, splendid and inspiring tales crossed the seas, of what Boy Scouts were doing "over there" for the great cause of liberty and right.

In England, immediately upon the outbreak of the war, Lieut.-Gen. Robert S. S. Baden-Powell, the founder of the Scout Movement, issued a statement to his 16,000 Scouts showing how every Scout-trained boy, though too young to bear arms, could still serve his country in her hour of need. He told them it was a test of the Movement. Was a Scout really "prepared," as he claimed to be? Did Scouting really train for efficiency and intelligent service in times of peace and calm and prosperity? Scouting stood the test magnificently. In the British Empire, as elsewhere, Boy Scouts played a gallant part in the winning of the war, serving not with guns and grenades, but in other no less essential ways.

Throughout the Empire, Scouts guarded and patrolled bridges, telegraph wires, etc., served as messengers and despatch-bearers, helped collect information as to available supplies and transports, did farm and shop duty to release men for service, maintained first-aid dressing- and nursing-stations, dispensaries and soup-kitchens, acted as guides, telegraphers and orderlies, intelligence officers and coast guards. Over 2,500 Scouts were attached to the office of the War Department, some provided with bicycles as messengers, others employed as clerks or office-boys, all of them registered, as were thousands of others throughout the United Kingdom, as ready for duty "anywhere,

anything."

The Admiralty attached 1,200 Scouts to the troops guarding the east coast, and 3,000 were used in assisting the police in various capacities and in watching the telephones and telegraph lines.

WALKING INFORMATION BUREAUS

When the English mobilized at Havre or Bologne, there were squads of Scouts on duty at every landing-dock, hotel, police and railway station and telegraph office. A correspondent says of them: "They were veritable walking information bureaus and knew every street, public building, office, and camp. Moreover, they would hop on a bicycle and go with one anywhere, regardless of the time or distance. How the English boys absorbed the amount of information they had of strange towns I don't know, but they had it."

The answer is not far to seek. Scouts are taught not only to keep their ears and eyes, but their minds open. A Scout isn't "muddle-headed." He knows that willingness to serve isn't enough by itself. It is a matter of brains as well as heart. Observation, resource-fulness, initiative, reliability are part

and parcel of Scout-training.

Sea Scouts came into their own when the coast watch was needed. At many stations there were no regular coast guards or local naval officers, and the Scouts, organized under their patrol leaders, were in sole charge, receiving only occasional visits of inspection from the coast-watching commissioner or



The Boy Scout Organization

A map showing the remarkable extent of the Boy Scout organization. The Boy Scout develops some of the best characteristics of the soldier, and without the actual military supervision.

coast-guard officer. The Scouts had to patrol the beach, three miles out and three miles back, in all weathers. Rain and sun, hail, storm, and snow were alike to them, and, clad in their sou'westers and overalls, they might challenge comparison with the most seasoned missioner after a recent visit to "somewhere on the south coast," may be here quoted: "In the dark hours of the morning the station was awakened (not that all were asleep) by the booming of rockets betokening a ship in distress in the bay in front. 'Turn out the



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Five Husky British Sea Scouts

These Swansea boys were accepted by the Admiralty as signalers during the war. At many English stations there were no regular coast guards, and the Boy Scouts, under their patrol leaders, were in sole charge.

mariner. They had to watch out for fishing-boats that work by unauthorized hours at night and to examine all boats coming in to the shore to see that the men had their permits in order. The Scouts had to answer all naval calls on the telephone, and report all vessels passing up and down; they had to patrol the beach or telephone lines, to save wreckage, and to give assistance to any vessel in distress. A vivid word-picture, painted by a Sea Scout com-

Scouts off to the cliff!' There, while the wind and rain howled over the storm-tossed seas, they waited, watching to see if they could be of assistance to their fellow-men out on the helpless vessel which was being buffeted by the heavy seas as they roared up the beach. At last the day broke and there could be seen the outline of a three-thousand-ton steamer driven high up on the shore, whose stearing-gear had broken down, leaving her helpless and at the mercy



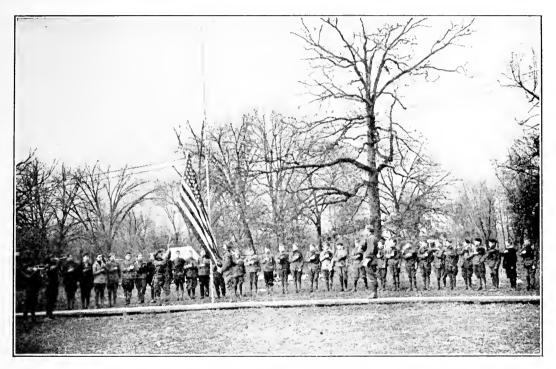
The Daily Good Turn



of the seas. Knowing the shore as he did, the officer in charge on the cliff called to a Scout to signal out to the crew to wait until the tide fell, as by then they would be able to walk dryshod to the shore. Promptly the order was carried out and the signal duly acknowledged. But in spite of this the crew, at the risk of their lives, leaped into the sea, and with the help of willing hands struggled ashore. Such are the incidents which relieve the

next to him, until it reached the navalbase commander. Every night these lads carried their despatches along the coast, in foul weather as well as fair, through storm and snowdrift, until their duty was accomplished.

One could go on indefinitely with stories of British Boy Scouts and their war-time work. There are tales to tell of how they captured notorious spies and prevented air raids, how their Scout-training in first aid rendered them



Pledging Allegiance to Their Flag

Ready for duty anywhere, anything! They justified Scouting by being good Scouts.

monotony of our brothers who are taking the place of the coast guards who were called away to more dangerous and arduous duties."

Nor is this all of the record of the Sea Scout's duties. Despatch-carrying was one of the most essential and arduous of his tasks. He had to pass on from hand to hand the daily log kept by his own patrol and by the patrol

particularly valuable in critical moments, how they worked on farms, how they did night police-patrol work, how they performed dozens of other tasks by way of meeting the challenge of their great chief. They reflected the spirit of England and of their older brothers, who were giving up their lives in France. They justified Scouting by being good Scouts.

A SCOUT HERO

Perhaps the most famous Scout-hero tale is the story of Jack Cornwall, the Scout, who, joining the Navy in August,



At the Service of Other People at All Times

1915, was on the *Chester* when she engaged in the battle of Horns Reef a

few weeks later. He was mortally wounded early in the action, but stood at an exposed point, quietly awaiting orders, with the gun's crew dead and wounded around him. He was scarcely sixteen years old. His case was recommended for special recognition for exceptional courage and steadfastness to duty. The captain of the Chester, in writing to Cornwall's mother, said: "His devotion to duty was an example for all of us. He felt he might be needed—so he stayed there, standing and waiting, under heavy fire, with just his own brave heart and God's help to support him."

Cornwall's case is not an isolated one. Hundreds, thousands, even, of other Scout-trained boys offered and gave their lives as fearlessly for "God and Country" from America as well as lands across the sea. Scouting makes men.

BELGIAN BOY SCOUTS

In Belgium, also, Scouts did splendid service. In Brussels they had regular headquarters, to which they repaired daily for instructions. Singly, in twos and threes, or in patrols of eight, they marched on some mission, conscious, yet not obtrusively conscious, of their responsibilities. Each lad wore a band on his right arm with the letters "S. M."—"Service Militaire." Many of the boys were cyclists and not a few had motors on which they were seen hurrying from some school or hotel which had been converted into a temporary hospital, in search of stores.

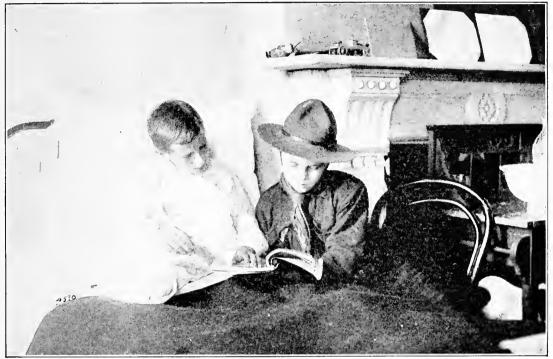
FRENCH SCOUTS AND ANOTHER HERO

The story of the heroism, devotion, and hard work of the French Scouts would fill a volume in itself. Everywhere they took the places of men who were needed at the battle front and

XI--7

did gallant service along every conceivable or inconceivable line.

To match the Jack Cornwall story, we may add the heroic death of the French Boy Scout who was shot by the Germans because he had refused and asked whether the French were about. He refused to give any information. Fifty yards farther on fire was opened from the cover of the wood. The prisoner was asked in French if he had known that the enemy was in



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Allies: An English and a Belgian Boy Scout

An English Boy Scout, injured in the performance of his duty, is explaining to the Belgian Boy Scout at his bedside the British code. The Belgian boy is one of many refugee families who sought a haven of safety in England.

to betray a party of his countrymen who were ambushed in a nearby wood.

The following account of the incident is taken from a letter found on the body of a dead German:

"A traitor has been shot—a little French lad belonging to one of those gymnastic societies which wear the Tri-Color button. The poor little fellow in his infatuation wanted to be a hero. A German column was passing along a wooded defile, and the boy was caught

the forest, and he did not deny it. He went with firm step to a telegraph-post and stood up against it, with a green vineyard behind him, and received the volley of the firing-party with a proud smile on his face. Infatuated boy; it was a pity to see such wasted courage."

How many boys and girls do you suppose shared that feeling?

When the letter appeared in *Life* it called forth the following response from Katherine Lee Bates:

"WASTED!"

ASTED? O blind of heart, you wrote it wasted,
The loyalty, the courage and the pride;
Nay, you, who could but pity and deride
That pearl of boyhood, smiling as he tasted
The sacrament of death; you, who had hasted
By steep descent from where the stars abide
To heavy darkness; you, who had denied
The gleam of God in your own clay, are wasted.

Will not all lovers of the fair and true
Forever see that little figure stand
Erect against the post, to die for France?
Her leafing April vineyard better knew
The beauty of that deed than your dull hand,
Wondering at honor, counting faith mischance.

BOY SCOUTS OF AMERICA GET IN

But we come to the story of the Boy Scouts of America and their share in the winning of the Great War. When the United States declared war in April, 1917, the number of boys and men in the organization was more than twice the number enrolled at that time in the Army, Navy, Marine Corps, Naval Militia, and the National Guard put together. This trained group of Scouts and Scout leaders was immediately placed at the disposal of the government, for whatever service individually or collectively it was most fit. The National Council passed a patriotic and dignified resolution to this effect, and a small boy on his own initiative wrote as follows to the President:

DEAR PRESIDENT WILSON:

I am a first-class Boy Scout, fourteen years old. I own a complete wireless set which I operate by international Morse code. I offer you myself and my wireless for our country. We men have all got to pull together.

Yours truly,

The spirit in both cases was the same. The single Scout and the whole Scout body were equally eager and "prepared" to serve and to "pull together." All Scoutdom made ready to get on "Uncle Sam's team," as the late Colonel Roosevelt, a genuine good Scout, urged.

BEANS! BEANS! BEANS!

The first call for service came from Mr. Hoover. Briefly, it boiled down to beans. Mr. Hoover said ships and food were the crying need of the hour, and asked, in substance, if Scouts couldn't get busy raising beans? They could. No sooner said than done. Beans were only a symbol. Every Scout became not only a gardener himself, but gave his friends, family, and neighbors no peace till they, too, delved and planted and weeded. That first war year Scouts operated thousands of war gardens, produced literally tons of food, worked on farms and in orchards and canning-factories, spread gardening propaganda, "conserved" gallantly, at the cost of much sweet-tooth gratification. Some troops raised enormous

crops of corn and beans. Others went into farm camps, or into canning and drying businesses of their own.

As time went on, neither the enthusiasm nor the determination of the Scouts to help feed soldiers waned. An even more successful gardening campaign was waged the second year of the war. From the moment Mr. Hoover's challenge of Beans! Beans! rang

the soldier he was feeding and knew that he was serving his country well."

WORKING WITH THE TREASURY DEPARTMENT

Gardening was only one phase of Scout service. Perhaps the most remarkable achievement of Scouts during the war was their success in cooperating



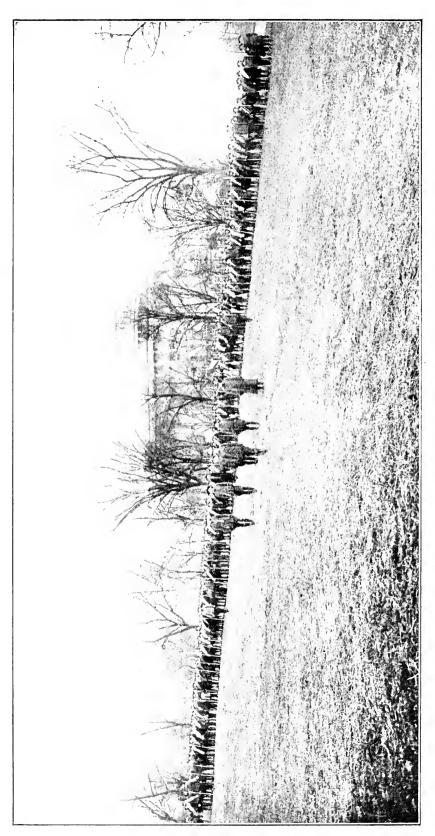
This Beats Digging Bait All Hollow

A Scout with a garden was just as effective as a man with a gun.

out, Scouts were in active service, early and late. They couldn't fight. They were too young. But they could and did produce food which put fighting pep and sound nourishment into the men who were doing the fighting, and they kept to the task with a will. As Mr. Hagedorn says in an article in The Red Cross Magazine: "A chore had suddenly become thrilling. The hoe had become as romantic as a gun, for the boy who wielded it thought of

with the Treasury Department in putting through the Liberty Loan and War Savings Stamp campaigns.

In the first four bond campaigns, Scouts made sales to the amount of \$278.744,650, representing 1,867,047 individual subscriptions—and this, in most cases, after the regular adult agencies had thoroughly canvassed the community and only the "leavings" were accessible to Scout efforts. By splendid team-play and determination, serving



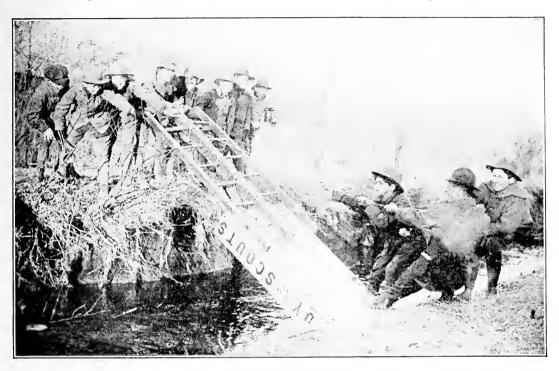
Scouts on a Visit to the White House

President Wilson is the honorary president of the Boy Scouts of America, and here we see members of that organization paying him an official visit.

as "gleaners after the reapers," they increased the total bond sales to no inconsiderable extent. Many amusing and interesting tales reach headquarters of "how they did it" and of the patience,

Savings Stamp sales. Up to date 2,188,-063 cards have been received at head-quarters, amounting, approximately, to \$41,858,438.

The Treasury Department offered



Boy Scout Ingenuity

A trek-cart that can't be turned into a bridge when needed is not much of a cart.

persistency, and loyalty they put into the job. They worked tirelessly, early and late, made a house-to-house canvass, dividing the territory to be covered into districts for thoroughness' sake, "hiked" miles afoot or on a bicycle out into the country, to remote farms, persuaded foreigners and half-hearted Americans to part with their dollar for their own and the nation's gain. The same thoroughness they put into tying knots and building fires "just right" they put also into bond-selling.

The returns for the last loan campaign show 385,512 subscriptions sold by Scouts, amounting to \$59,430,825.

They were no less successful in War

award medals for this service as well as for Liberty Bond sales. At present 13,231 Ace medals have been awarded to Scouts, 40,008 bronze palms, 2,516 silver palms, and 416 gold palms, besides the 23,111 Achievement buttons, given for 25 individual sales. The Ace medal is awarded when the sales amount to \$250. A bronze palm is added each time the sales amount to an additional hundred dollars. Ten bronze palms entitle the holder to a silver palm, and fifty bronze palms, or five silver ones, entitle him to a gold palm.

Thus the patriotism of the Boy Scouts in terms of dollars amounted to about

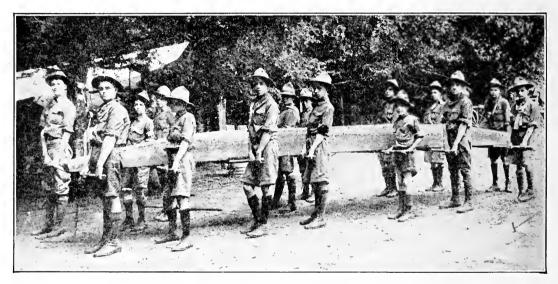
\$380,033,912.

COAST GUARD SERVICE

Immediately upon our entrance into the war, plans were put into effect in coöperation with the Navy Department whereby Scouts were to act as aids to the regular coast guard and relieve them in case they were needed for active service. In each of the naval districts

SECRET SERVICE AND EMERGENCY CALLS

In connection with the Naval Intelligence Bureau, Scouts did valuable confidential work and were particularly successful in locating illicit wireless stations. There are plenty of "thrills" in this part of the Scout story, as you can well imagine.



It Is, Oh! So Easy

When each Scout does his share—and there are no quitters here.

Scouts held themselves in readiness to act as lookouts and guards, or for emergency first-aid service. They made maps of the district, ascertained information as to location and telephone numbers of adjacent lighthouses, coast guard and weather-bureau stations, police and fire headquarters, character of roads, available motor-boats, etc. If the more spectacular feats played by the British Scout Coast Guard were denied our own boys, because of the geographical remoteness from the foe, they were no less ready and eager to serve, had the emergency come.

And we know that, given the opportunity, our boys would have showed in danger the same gallant spirit.

As every one knows, Scouts are trained in first-aid and general emergency service. In railroad wrecks, fires, and cyclones their work has been invaluable. Perhaps the most significant of Scout services along this line, when considered from a war-emergency viewpoint, are those rendered at the time of the Eddystone, Pennsylvania, explosion, and the even more terrible Morgan disaster.

Scouts have a regular well-workedout mobilization plan which works as automatically and efficiently as that of a fire department. The Eddystone Scouts had promptly offered their services to their country through their mayor, April 6, 1917. By April 10th the test of the sincerity of their offer came when the great munitions-plant explosion occurred. In an incredibly short time after the explosion Scouts were on the scene of the disaster. They were given charge of the traffic, served as guards and police aids, gave first aid, cally continuous active service. There were from thirty-five to fifty Scouts on duty day and night. This included work in canteens and with the Red Cross both at hospitals and with ambulances, service as guides, information clerks, and police aides. They erected



Photo by H. H. Simmons

Boy Scout Secrets

Every boy can tie a knot, but not seventeen different kinds of knots. The Boy Scouts can.

carried and set up cots, made bandages, delivered food, and generally helped to bring order out of chaos. That a Scout is "prepared" is no idle boast. He knows what to do and how to do it. He can take or give orders with equal dignity and force. He is modest, useful, efficient, on the spot when needed, pledged to be helpful to all people at all times.

After the great explosion of the munitions plant at Morgan, New Jersey, Scouts from the surrounding towns immediately answered the mobilization call, and for several days did practi-

a temporary field-kitchen in South Amboy, where they prepared and served hot foods continuously.

The devastating wave of influenza which swept the country proved the efficiency of Scouts and their will to serve. In New Brunswick, New Jersey, Scout troops worked night and day during the height of the epidemic, guiding ambulance-drivers, escorting nurses, acting as messengers. In York, Pennsylvania, Scouts set up tents to serve as temporary hospitals and acted as orderlies and aides. Thousands of pieces of literature were distributed



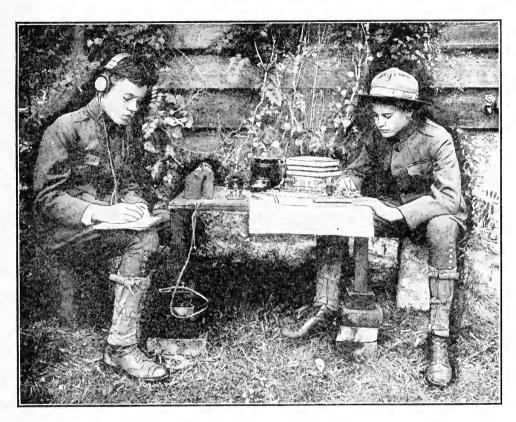
"A Boy Scout Is Clean"
The Boy Scouts are 100 per cent. patriotic; and their patriotism is certainly practical.

spreading information as to how to combat and avoid disease.

In Richmond, Virginia, Scouts secured, equipped, and manned several ambulances for emergency-hospital service, which were busy every moment, night and day, during the epidemic. In New Bedford, Massachusetts, the headquar-

A WALNUT-TREE HUNT

Scouting is an outdoor proposition. Scouts are at home in the woods and are trained in nature lore. Therefore, when the word went out that the government had need of an enormous amount of black-walnut wood to carry



Boy Scouts in a Wireless Station

ters of six troops were taken as emergency hospitals. Scouts served as messengers, four to each hospital, in three shifts for a period of four hours each. Other Scouts acted as orderlies in the regular hospitals, helped on ambulances, and served as volunteer telephone operators.

Similar instances of Scout service might be multiplied indefinitely from reports representing every section of the country. out its war program of gun-stocks and airplane-propeller manufacture, it was only natural that Boy Scouts should again come to the front. Acting under their Scoutmasters, they made a coast-to-coast canvass of standing black-walnut timber, providing the War Department with accurate and exhaustive information as to the amount available and the location of this valuable wood. The results of the survey were reported daily to the Forest Service, who in

turn tabulated the record and handed it on for the use of the War Department. Following this plan, Scouts located and reported 20,758,680 board feet (5,200 car-loads) of walnut timber.

All Dressed Up and Somewhere to Go—On a Hike

Conservation is a Scout watchword, however, and Scouts pledged themselves to plant new trees to take the place of those which had to be sacrificed to the need of the hour. Tree-planting is becoming an important Scout activity, by the way. During the past year

hundreds of trees have been planted by Scouts, both singly and in groups, in parks or along highways, in memory of that sturdy Scout and great American, Theodore Roosevelt.

PEACH PITS AND NUT SHELLS!

Another valuable service performed by Scouts was undertaken in coöperation with the Red Cross, at the request of the Gas Defense Division of the Chemical Warfare Service. This service was the collection of carbon material for use in gas-mask manufacture, consisting of nut shells and fruit pits. When the armistice put an end to their operations, Scouts had already collected over 100 car-loads of material, an amount sufficient to make 500,000 gas-masks.

BOOKS FOR SOLDIERS

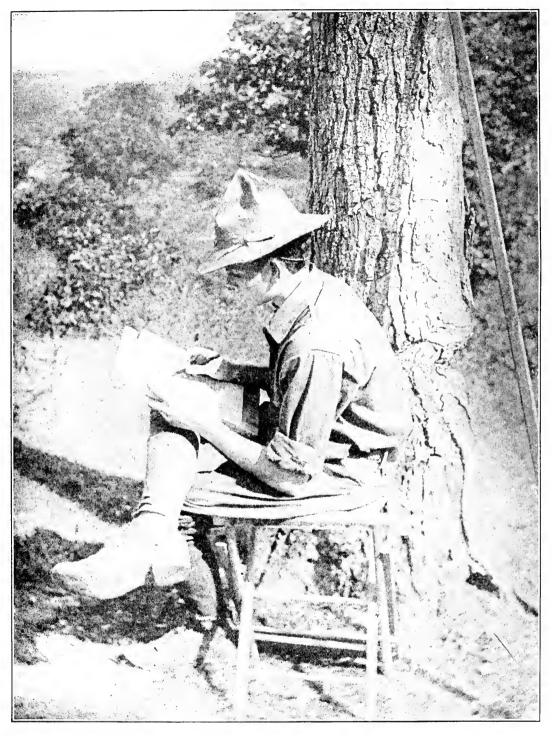
Under the auspices of the American Library Association, the Boy Scouts of America coöperated in a nation-wide drive for the collection of books for soldiers, besides doing an enormous amount of similar work locally for canteens, huts, and training-camps.

From the first, Scouts were the loyal right-hand helpers of the Red Cross. They distributed posters and other propaganda, helped teach first aid, rolled bandages, collected oakum, served as "victims," swepc, built fires, and washed windows for Red Cross headquarters, ran errands, served as clerks and telephone operators, and made themselves generally useful in a hundred ways.

They also worked in various capacities in connection with the War Camp Community Service, Knights of Columbus, Jewish Welfare Board, Y. M. C. A., and dozens of other patriotic agencies. In fact, there is no limit to the things they did. The more they did, the more they were asked to do, because people learned that a Scout was the best sort



Third Liberty Loan Poster



Answering the Call to Service

Map-making is one of the most fascinating things that Scouts learn. It is not easy work, but the Boy Scouts never undertook a task that they did not do well.

of help when you wanted a thing done.

He didn't grumble, no matter how hard or dull the job was, for a Scout is cheerful and he is pledged to do a good turn a day, anyway, and it might as well be one thing as another.

If he was given a task to do, he did

copies of President Wilson's Flag Day Address, and to tell the Americans where and how they could get other information as to why we were at war and why we had to see that the war was won. This work was undertaken at the request of the Committee on Public Information, and Scouts did the



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Practice in Semaphoring

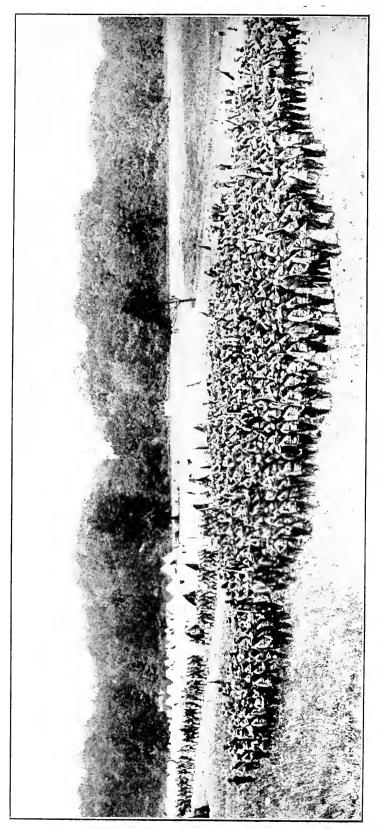
The Scout is taught not only to be athletic, but to employ his ability for useful ends. Here a group is overcoming the absence of natural elevation.

it and did it right. He didn't leave it half done, or so badly done that it had to be done over. A Scout is trustworthy. He is taught to live up to his promises, to do what he is told, and to do as well as he knows how.

SCOUTS AS PROPAGANDA-PUSHERS

It is estimated that Scouts distributed during our war period no less than thirty million pieces of patriotic literature. One of the first tasks they were called upon to perform was to distribute work in the name of the President of the United States.

Scouts are notoriously 100 per cent. patriotic. Whatever they did they did enthusiastically, not for any reward, but because they honestly wanted to help win the war. Who knows how far-reaching was the effect of their enthusiasm, how many seeds of national loyalty they sowed as they went along, selling bonds, locating walnut-trees, begging for books and magazines for our fighting-men, urging people to save food and produce food? Enthusiasm



One of Our Boy Scout Encampments

The Scout Movement is the greatest thing that ever happened for America's young boys. A chap that once gets the Scout feeling buried in his heart will carry it with him through life.



Courtesy of Red Cross

Emergency Coast Guard Service

A Scoutmaster is here giving preparatory instruction to part of his troop on coast patrol duty.

is contagious. There isn't any doubt that every loyal, enthusiastic Scout, burning with patriotic zeal and will to serve, was an incalculable force no less significant than bombs and bullets in war-winning.

When the Scout bonfires blazed in celebration of the long hoped for world peace, every Boy Scout here in America who had given his own good measure of active service could feel that he had helped to earn the rewards of victory.

SCOUTS IN SERVICE

As has been already said, hundreds of Scouts and Scout leaders followed the call to the colors and played gallant part. It is the practically unanimous verdict of officers that Scout-trained men make the best soldiers, and this in spite of the fact that Scouting is entirely non-military.

Baden-Powell says: "I have seen

men on the Somme front in sheds which were mere skeletons of rafters, doing nothing to protect themselves during icy weather. They never had been Scouts. In the midst of these skeletons was a pigsty, made weather-proof and fitted with a brazier in which cow-dung was burning. The occupants were comfortable and running no risk of pneumonia."

An American officer gives this tribute: "They [Scouts] are like bits of radium giving out examinations for good in all directions," and adds that one ex-Scout in a company invariably gives out such a spirit of cheery and energetic loyalty that he acts as a leaven to the mass and helps to raise it to a higher standard of efficiency and reliability.

ONE TROOP'S REMARKABLE WAR RECORD

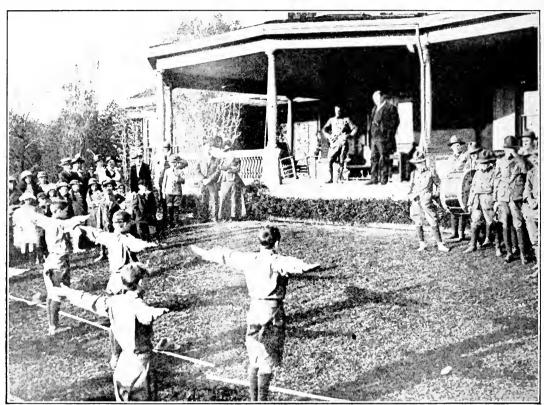
Troop No. 1, of Waltham, Massachusetts, has a conspicuous war-service record. The troop was organized in

1909. At the date of our entrance into the war one hundred and forty boys had been at one time or another registered with it. They were the stuff of which good soldiers are made. One hundred and two of these one hundred and forty boys entered either the Army or the Navy for active service. Fourteen more of the number volunteered, but, being rejected for various reasons, went into government service in departments to which they were eligible.

tenant of the junior grade in the Navy, and three were ensigns. Four of this number received distinguished-service recognition, one was three times cited for bravery, and four gave up their lives for their country.

HOW SCOUTING HELPED

Many letters came from overseas from time to time to National Headquarters from men who are, or have



The Late ex-President Roosevelt Reviewing Boy Scouts at Sagamore Hill

One hundred and sixteen young men, therefore, from this one troop, 87 per cent. of the total enrolment of the troop since its organization, did actual war work.

Nineteen of these received commissions—one as a captain of engineers, six as first lieutenants, two of them in the Aviation Division; nine were made second lieutenants. One became a lieu-

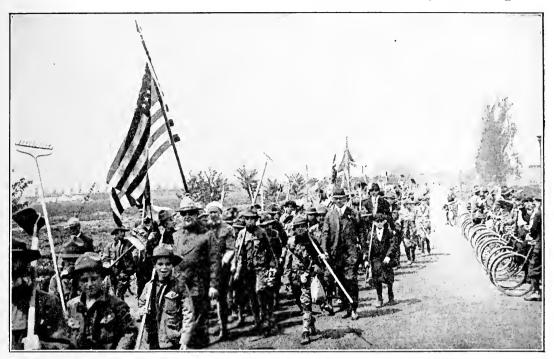
been, Boy Scouts of America. It is a great gratification to all who believe in the Scout Movement to find that Scouting has done for these boys what it claims to do—that is, make men of them, and that the Scout-training has been of both practical and spiritual value to the members of the organization who followed the colors to France.

XI--8

Here are a few quotations from letters which speak for themselves:

One boy writes: "I am here in camp as a soldier in the National Army and enjoy it very much. I wish I had time most important that I have to relate to you.

"The sergeant with whom I work is a former Scout. When I was assigned with him as he was just starting out



The Power Behind the Gunners
These Scouts are just starting for their war-gardens.

to write something for you on what Scouting has meant for me in the way of preparing me for this new life. Let me say right here that if every drafted man had been a a Scout before coming to camp it would add tremendously to his training."

Another says: "The question in your mind, I'll bet, is whether or not Scout life helped me in my work as a Marine. I should say emphatically that it has. While a Scout I learned, first of all, how to rough it in camp. I can cite hundreds of cases where boys have been as uncomfortable as mice in a cat-factory, while others of us, mostly former Scouts, had the time of our lives being comfortable. This instance or side of Scout life is by no means the

as a company commander and I as an assistant, we decided that we'd try a certain way of handling the men, and it worked. We'd never try any other way now. We just simply tried to treat the men as good Scouts, and we evidently succeeded, for the captain very kindly told us that we had the best bunch that ever went through this post. Our companies since then have graduated with colors flying, so we're going to continue being good Scouts."

"I want my brother Boy Scouts to know that knowing the wigwag and semaphore code and playing the bugle in the Boy Scouts has helped me out a lot since I enlisted as a trumpeter in the United States Marines. "I am only sixteen now, but I am almost able to be rated just because I played the trumpet or bugle in the Boy Scouts, and receive five dollars extra for knowing the semaphore code, which I also learned in the Boy Scouts.

"I am still greatly interested in the Scouts and their doings. In case I come out of this all whole I intend to take up the work again. Although in America's fighting force, I still keep the habits and morals learned in my five years of Scouting. I see chaps chewing, smoking, and drinking and look back at my training in the Scouts with pride. The Scout Movement is the greatest thing that ever happened for America's young boys. A chap that once gets the Scout feeling buried in his heart will carry it with him through life."

AN AIR HERO

Scout Milton B. Lowenstein began his flying career in the ground school at Princeton, and subsequently flew at Fort Worth, Texas, Post Field, Fort Sill, Oklahoma, and in France, where he

served for seven months as bomber, taking part in the raids on the Germans near St.-Mihiel, Conflans, Dun-sur-Meuse, Longuyon, and other towns from which the Huns were subsequently routed. One of the questions asked upon the application blank for entrance into the aviation service is as follows: "Stace your affiliation with the Boy Scouts of America." Scout Lowenstein says that when he saw that he was sure he would have the opportunity to learn flying. The fact that he was an Eagle Scout, the highest rank attainable in Scouting, made the government willing to waive the requirement of two years at college and accept him as air pilot. Flying above New York City on May 17, 1919, the lieutenant-pilot scattered President Wilson's Boy Scout Week Proclamation far and wide. Scouting had helped to make him what he was, and, returning from overseas a genuine hero, he continued to serve the movement.

A SUPREME SACRIFICE

Edward J. Kelly was a member of Troop No. 25, Manhattan. One night

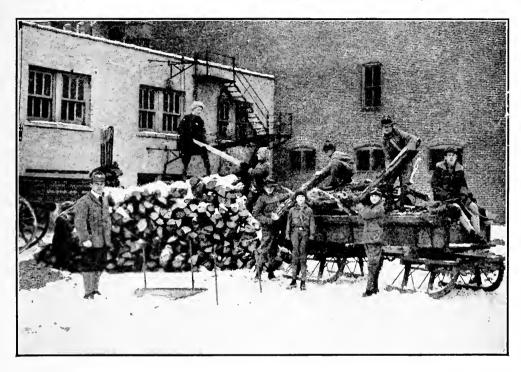


The Farm Hand Announces that Dinner Is Ready

The Scouts produced food which put fighting pep and sound nourishment into the men who did the fighting.

he came home in uniform, the first time he had ever worn any uniform except that of a Boy Scout. The uniform was that of a private in the United States Army. He was only sixteen. His mother tried to persuade him that he was too young to enter service and that the Army wouldn't have him if his says, solemnly: "Died in his country's service. Salute!"

Scout Luther O. Weaver was a member of Troop No. 54, of Brooklyn. Early in 1917 he enlisted with some fifty other Scouts in the Reserve Corps of the United States Navy. He was assigned to the Brooklyn naval station



Scouts Cut Fire-wood

Endless activity is the unwritten motto of Boy Scouts; and useful activity is a second rule.

real age were known, but he won his point, for all that. That was the last the family heard of or from him, except that every month his pay-check came home to his mother. One night he went over the top in a raid and his story ends in the darkness of No Man's Land.

At the Boy Scout Headquarters in Madison Avenue, New York, there is a gold star in the margin of the service flag. The star stands for Scout Kelly. Whenever the troop meets and the roll is called Kelly's name is called, too, and the patrol leader steps forward and

and later enrolled as a signalman on the U. S. S. Alcedo, which sailed in July for the submarine zone. It was the flagship of the fleet which patrolled the waters from the Azores to Ireland, convoying ships, giving notice of the appearance of submarines, and holding itself in readiness to assist the crews of the victims of German frightfulness. It was the Alcedo which picked up over one hundred survivors of the Antilles. In November, 1917, the Alcedo was struck without warning by a torpedo and sank immediately. Among those

lost was Scout Luther Weaver, who died as a good Scout should, doing his duty.

SCOUTING GOES ON

In spite of all the tremendous amount of extra activities which the Boy Scouts undertook in connection with war service, the regular work of Scouting was not neglected. They kept up their civic good turns, clean-up, good-health, and safety-first campaigns, maintained fire patrols, cooperated in all sorts of community movements, undertook the raising and lowering of community and school flags, and did a hundred other things which go to make Scouting all but indispensable wherever it is in operation.

They kept on, as time permitted, also with their regular Scout program-first aid, nature-study, hiking, camping, signaling, knot-tying, qualifying for merit badges, earning honor medals for lifesaving, making themselves into Eagle Scouts.

They carried on. They kept playing. They kept sticking to school. They kept loyal to church and Sundayschool. They went on exercising the Scout spirit at home, in the street. wherever they were, being helpful to all people at all times, being loval and helpful and kindly and trustworthy. They lived up to the pledge of their oath to try to keep themselves physically strong, mentally awake, and morally straight.

"I'VE GOT A BROTHER IN FRANCE!"

Jimmy's "Adopted" and What the Energetic Boy Scout Did for Him

JIMMY was a Boy Scout and he was a wizard at selling Liberty Bonds. He seemed to have a way with him that forced people to take just one more, in spite of their pleas that they

"simply couldn't afford to buy another."

Jimmy (perhaps you know him) was a persistent young man. He was president of his class in High School, delivered a newspaper route morning and night, and worked for a grocer during Saturday's rush hours. Anna Steese Richardson, of the Vigilantes, said to Jimmy one day after he had sold a bond to a particularly hesitating lady, "Jimmy, how can you find time to sell Liberty Bonds, and why do you take such a great personal interest in the war?"

"I have a brother in France!"

To me this explained everything, but my friend exclaimed in a shocked voice:

"Why, Jimmy B—, you're an only son!"
"I got a brother in France," he reiterated doggedly. "I got him all picked out. He has brown hair and eyes, and he wears his hat so"—drawing his own tan felt over his eyes at a rakish angle. "He ain't much taller than me, kind of thin, and quick as a cat. I don't know his name, but I'm going to get it soon. I've written a letter-'To a Lonely American Soldier'-and sent it care of General Pershing to the Expeditionary Force in France. I bet some fellow that hasn't any folks over there will answer it.'

My friend and I exchanged quick glances.

"Dr. Corbin said to us Wednesday night: 'Each one of you boys has a brother fighting for you in France. Go to it! Work for him like the mischief.' Well, I'm working for mine. If I sell a Liberty Bond, it's for him. If I run errands for the Red Cross, it's for him.'

Jimmy folded the Liberty Bond pledge, and tucked it into his pocket.

"Much obliged, Mrs. S---. Good evening."

A brother in France!



Straight Talks from the Scout-master



DAVID LLOYD-GEORGE

The Welsh Lad Who Became England's Greatest Statesman

THE earliest remembrance of David Lloyd-George is the picture of him-Lloyd-George is the picture of himself, an unhappy baby of three, with his little sister Mary, heaping pebbles against the gate of their little cottage, in a vain attempt to keep out the men who were coming to sell his mother's household goods. For his father had just died, leaving his mother with the problem of bringing up her little family alone. Her brother, Richard Lloyd, however, immediately came to her rescue, opened his house to take her and her children in, and from that time on devoted his whole life to the task of being a father to his little niece and nephews.

William George, who was a schoolmaster, had been filling a temporary position in Manchester in 1863 when his oldest son, David, was born, but the next year the family moved to Wales, and the boy grew up in the plain-living and high-thinking atmos-

phere of a Welsh village.

Richard Lloyd's house in Llarny-sturndwy was a picturesque little stone cottage, covered with vines, and over the door hung a sign, a lifelike painting of a shoe and a top-boot, and underneath, the words "Richard Lloyd, Gwneuthurwr," for he was the shoemaker of the village. But he did a great many things besides making shoes. A man of keen and vigorous mind, intensely interested in politics and all public questions, he was the acknowledged center of thought in the village. He was also one of the leaders of the Nonconformist Church of the com-

munity, the Disciples of Christ as they were called, and one of the most eloquent preachers.

A YOUNG LIBERAL

It is not surprising that we find young David, brought up in so liberal an atmosphere, organizing revolts against established authority at an early age. The village school was a "National" one, under the supervision of the Church. In it the children were taught the tenets of the Anglican doctrine, as well as reading, writing, arithmetic, and history. One day every year the village squire, Mr. Ellis Nanney, with others of the gentry, would come to hear the children recite the catechism. David Lloyd-George and his younger brother, William, were almost the only Nonconformists in the school; but David, with his genius for leadership which he had from his earliest youth, unwilling to publicly avow the principles he did not believe, organized a mutiny so thorough that, when the master confidently gave the familiar questions, to his amazement, instead of the responses that heretofore had always come so glibly, there was dead silence. The questions were repeated in a louder tone; still no answers. After a humiliating pause little William George began to feel sorry for the master and piped up a shrill, "I believe," and the spell was broken. The rest followed like sheep, all but the ringleader, who remained erect, red and silent. Nevertheless, it was a real victory, for the



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Action Front!

Where are the games of yesteryear? Gone are "Blindman's Buff," "Tag," "Ring Around a Rosy"; all vanished save possibly "Prisoner's Base." Youth to-day is made of sterner stuff, and his play-things are modeled after the all-absorbing war.

custom was abolished, never to be resumed.

David was famous in school for the ease with which he acquired knowledge. While the other boys would be poring laboriously over their books for hours. he would read the lesson through once and then be off to the woods. He never forgot what he had once read. He was a healthy, sturdy boy who lived much in the open, and he was fond of all sorts of games. Several stories point to a reputation for fighting. Once David came upon a group of boys bullying a little chap, and with characteristic energy he promptly offered to fight all four of them. The match promised to be epoch-making, but, to the grief of the boys, one of the masters got wind of it and the bout never took place.

Judging from the remark of one old farmer whenever he missed some of his apples or found a fence broken, "It's that David Lloyd that has done it," he seems to have been a prominent figure in the law-defying exploits of the village boys. Once, creeping through a tempting gap in a hedge that surrounded a large estate, David found himself face to face with the owner.

"Where are you going?" the latter demanded, fiercely.

"I'm going back," replied the boy, hastily and nimbly living up to his word.

LIFE IN A WELSH VILLAGE

The life at Llarnysturndwy was a happy one, although so very simple. The strictest frugality was practised by every one, and the Georges' way of living was not unlike most of the village homes. Lloyd-George says of those early days: "My mother had to make a hard struggle to bring up her children. But she never complained and never spoke of her struggles. It was not until long after that we were able to appreciate how fine had been her

spirit in the hard task of bringing up her fatherless children. Our bread was home-made. We scarcely ever ate fresh meat, and I remember that our greatest luxury was half an egg for each child Sunday mornings."

David decided to become a lawyer, and his uncle, who was determined to



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Miss Lloyd-George

The daughter of the Premier is shown starting one of the joy-riders at the new public nursery for the babies of munition workers, which was established at Woolwich during the war.

do everything in his power to help his nephew, decided to spend the savings he had accumulated on the boy's tuition and living expenses while he was studying. There was barely enough for the most absolute necessities, so when the village schoolmaster proved unable to give the necessary instructions in Latin and French a private tutor was out of the question. Undaunted, David, not yet fourteen, and his devoted uncle would spend hour after hour digging

at difficult constructions and abstruse meanings. They worked with such zealous concentration and purpose that when the boy was fourteen his uncle took him to Liverpool to try the preliminary bar examinations, which he passed easily.

HE BEGINS THE STUDY OF LAW

Two years later David George, as he was then called, went to Portmadoc, a town some miles away, to study law in the office of Breese, Jones & Casson. This was a life that he loved. Studying all that he could, he began to gain insight into the workings of politics as well as fulfilling his duties as solicitor. Shortly, fiery political articles from his pen began to appear in *The North Wales Express* under the pen-name of Brutus.

In 1881 he made his first visit to London, where a sight of Parliament called forth the following notes: "Went to Houses of Parliament. Very much disappointed with them. Grand buildings outside, but inside they are crabbed, small, and suffocating, especially the House of Commons. I will not say that I eyed the assembly in a spirit similar to that in which William the Conqueror eyed England on his visit to Edward the Confessor—as the region of his future domain. O Vanity!"

The same year he was elected a member of the Portmadoc Debating Society, which gave him opportunity to exercise his powers of eloquence and logic.

At twenty-one David Lloyd-George had finished his law training and was admitted to the bar as a solicitor. At the time he and his family could not afford the three guineas needed for the official robe, so the future Prime Minister of England went into an office and worked for it.

JOHN J. PERSHING

The Boyhood of the Commander-in-Chief of the A. E. F.

BY the time General Pershing was four years old he had a rather vivid idea of what war was. It was during the Civil War, and his father was a strong Union man in the violently Southern atmosphere of Laclede, Missouri. Mrs. Pershing had made a flag bearing the stars and stripes and hung it defiantly from their house. This infuriated the Confederate sympathizers of the town, and a band of them made a raid on the house in which several were killed and which would have surely resulted fatally for the Pershings had it not been for the timely arrival of a company of Union troops. When the officer in command of the rescue-party entered the house he was confronted by a small boy who had escaped from the

closet where, to his shame and humiliation, he had been placed for safety. Little John Pershing saluted smartly and inquired, "Are you a 'Merican officer?" The officer gravely acknowledged that he was, and John replied, "I'm going to be one, too, when I grow up."

After the Civil War came trouble with the Indians, and all the country-side was aroused by the outrages committed by the savage Cherokees. John and Jim Pershing organized a scout company among the boys, whose duty it was to keep a sharp lookout for any signs of trouble. One day the alarm was given, but it proved to be only a joke played by one of the boys, craving excitement. He got it. The valiant

scouts were so enraged that a general fight was started, a fair rival to the Indians in vigor and fury. That night most of the scouts were severely punished by unfeeling parents when they appeared with torn jackets and bleeding noses. Mr. Pershing, however, only said to his son: "Fighting, eh? Well, it will make a man of you. But never let any one say he has licked you."

A KNOTTY PROBLEM

At school John Pershing was not a brilliant scholar, but he worked with the utmost concentration and tenacity. He never gave up. One day the teacher put on the blackboard a very difficult problem, and announced that whoever could give the answer should receive a prize of The Life of George Washington. The problem was beyond anything they had had, and only a few took the trouble of copying it—it seemed hopeless. John Pershing was one of the few, and he solved it after working most of the night. When the teacher gave him the prize he asked the boy if he wouldn't make a little speech. That was a terrific ordeal, but John bravely got to his feet and said: "I'm sorry you all didn't win a prize, too. I—I—I'm much obliged. I'm going to grow up like George Washington."

Mr. Pershing was a very successful business man who had found in his store a gold-mine. He invested most of his money in farm-lands, and in the summer put his sons to work on them. This out-of-door life was the best thing in the world for the boys, who developed into fine, strong lads. Mr. Pershing, following the general custom of buying a great deal of land with small mortgages, suffered severe losses in the terrible drought of 1875. The crops were entirely destroyed, the mortgages all were foreclosed, and the Pershing family found themselves with

the house they lived in and a capital of fifteen dollars. Mr. Pershing went to

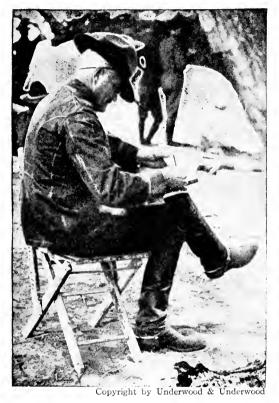


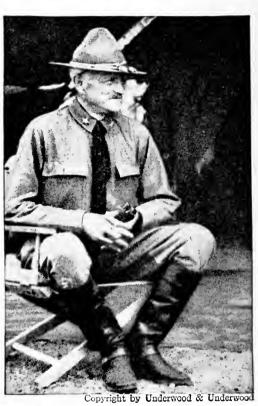
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General Pershing as a Boy

This lad's mother little thought that he would one day command the greatest army ever raised by his country. Kansas City to look for a position, leaving John to take care of the family. The boy then took a step that required great courage. He took the position of teacher in the colored school at Laclede and, from all accounts, filled the post very successfully, permitting no inter-

course in two years. He then returned home and began to study law. At the same time, being an independent young man, he took another position as schoolteacher in a town called Prairie Mound, nine miles away. One day a dog strayed into the school-room and one of the older





General Pershing in the Field

America's Great Man. There is no gold tinsel about him.

ference from the bullies of the neighborhood who tried to break up his classes.

AN EARLY BATTLE

Soon the father, who was a man of real ability, began to make a success in his new line of work and John was able to resume his studies. He went to the Normal School in Kirksville, which had a good standing, and graduated in 1880 after completing the

A photograph of a German general would show a gala uniform and a host of decorations.

boys found exquisite pleasure in kicking the poor little animal down the aisle. The young teacher promptly delivered a sound beating and put the offender out of school. The next day John Pershing found the father of the boy waiting for him with a gun. Without turning a hair he walked up to the blustering man and coolly wrenched the weapon from his astonished hand. Then followed a struggle that took all of John's skill and endurance, for his opponent

was a much heavier and stronger man. But after a short and furious bout the older man was begging for mercy, and when the teacher, trying to look unconcerned, walked into the school-room he found the following tribute in large letters on the blackboard: "Teacher is the Boss here."

MILITARY TRAINING

The study of law by oneself is apt to prove discouraging business for a young man eager to be getting ahead, and John Pershing, seeing an announcement of a competitive examination for entering West Point, decided to try for it. He passed it easily and entered the Military Academy in 1882. There he made a fine record, and, when a first-classman, was given the highest honor that a student can win-he was made cadet captain and given command of a company. On graduating he was assigned to the Sixth Cavalry, which was then in action in the Southwest against the Apache, Geronimo. From the time he first saw active service Pershing proved himself an expert soldier and able leader. He was highly complimented by his superior officers upon the masterly way he conducted a pack-train through the desert for forty-eight hours, without a single casualty, although they were under almost incessant fire from the Indians concealed in the brush.

Another exploit which showed great daring and skill was the rescue of a band of cowboys. The cowboys had gone in search of some cattle-thieves, and after they had caught them they found themselves in turn attacked by a band of Indians. One cowboy, by desperate riding, brought the word through to the post, and Lieutenant Pershing, with only ten men, galloped to the rescue. Scattering his men so that they would look like more, he dashed upon the Indians from the rear and routed them completely.

In 1890 Pershing had still more fighting with the Sioux Indians in the Dakotas, where he was in command of a body of scouts, composed of Indians, who distinguished themselves by their bravery and splendid work. Pershing has always inspired the men under him with the utmost confidence and devotion, which is largely responsible for the splendid results he has achieved.

GEORGES CLEMENCEAU

The Young Radical Who Learned the Value of Hard Work

IN all France, the region most deeply imbued with legend, tradition, and faith seems to be La Vendée. The fishermen and small farmers who live there combine their stubborn clinging to the old and established order with a harsh materialism that comes from the extreme rigor of their lives. They have to work desperately to eke out their frugal living from the land and uncertain waters.

A great contrast to his neighbors was old Doctor Clemenceau, the father of Georges Clemenceau. The family was one that had owned land in that province for generations, and Doctor Clemenceau, besides being a physician, was a philanthropist, a philosopher, and an amateur sculptor and painter of ability. He was, moreover, a violent Republican and Radical.

His son Georges, born September 28,

1841, inherited from his father the old man's devotion to liberty and his uncompromising allegiance to his beliefs, as well as his remarkably sound physique. When the boy was ten years old his father's hatred of tyranny and oppression caused him to protest against the coup d'état by which Louis Napoleon

AN UNTIRING STUDENT

The young Clemenceau was sent to the Lycée, or preparatory school, at Nantes for his early education. He was not a good student, and was, in fact, rather backward, except for his proficiency in English. He admitted



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Clemenceau Visits a Liberated Village

The waving French flags and the joy of the people attest that the pro-French spirit which Bismarck dreaded did keep alive in the towns and villages of the provinces of Alsace and Lorraine, which were in dispute between the Germans and the French.

transformed himself from president to emperor, and as a result he was sentenced to a term in prison. His young son, terribly moved, threw his arms about his father's neck and whispered, "Some day I will avenge you, mon père!" To which his father gravely replied, "If you really want to accomplish that, you will have to work; nothing comes of itself in this world; toil brings the harvests." You all know how great his harvest was.

that he only studied that so eagerly in order to be able to read *Robinson Crusoe*. But when the boy was seventeen he had a sudden mental awakening; he took an immense interest in everything that was going on, and became an indefatigable student. He had decided to follow his father and take up the profession of medicine. After training in the hospital in Nantes he went to Paris to complete his studies. He was then nineteen. After five years of hard work he published the

essay for his doctor's degree; its title was De la Génération des Eléments Anatomique, and it brought him no little reputation. Always a Radical, he had joined, immediately upon his arrival in Paris, a movement called "La Réveil de la Jeunesse" and, together with Émile Zola and another friend, edited a paper

IN THE UNITED STATES

The year 1866 finds Clemenceau in the United States, undertaking the practice of medicine in New York. Most of his time, however, was spent in the preparation of articles on various phases of America's social and industrial



Courtesy of Red Cross Magazine

Clemenceau at Front-line Trenches in the Somme Region

"The Tiger" did not hesitate to visit the front-line trenches, wearing a steel helmet. In this picture he is at the front in the Somme region—near Hardecourt-aux-Bois.

called *Travail*, which was so revolutionary in character that the young editors were promptly put in jail.

In the midst of his turbulent student life Clemenceau grew to know a man named Cluseret, a wild soldier of fortune who had just returned from America, where he had been serving in the Civil War with the Federal troops against the South. He filled the young Frenchman's ears with tales of America until, disgusted as he was with the Second Empire, then at the height of its power, he decided to leave France.

development, which were published in the Paris *Temps*. He himself says of this period, "I used to spend more time in the Astor Library than in my professional habitat on West Twelfth Street, where it was neither pleasant nor profitable to merely wait for patients—the virtue of patience is one for which I have never been particularly noted."

His next move is a surprising one he has become professor of French literature in a young ladies' college at Stamford, Connecticut. The new professor was a fine horseman, and an altogether delightful person as well as a brilliant student. He was intrusted with the young ladies when they went riding. We cannot know whether it was partially due to the romantic aura that used to surround riding-masters in general, in the eyes of young ladies, or whether it was wholly because of the charm of this particular one—at any rate, Clemenceau married one of his pretty pupils and brought her back with him when he returned to France.

THE TIGER OF FRANCE

Clemenceau's political career began in 1870 when he was made mayor of

Montmartre, a district where he was well known because of student days. This was no easy task for a man of twenty-nine. It was during the fearful days of the siege, and he had to see that the one hundred and fifty thousand men under him received their daily rations of bread, meat, water, and fuel. It was not the home of the Apache as we imagine it to-day, but there was a very unruly element, and Clemenceau had his hands full. However, he was a stanch revolutionist and astute politician, and his followers soon grew to know the fearlessness and ferocity that later won him the name of Tiger of France.

KING ALBERT OF BELGIUM

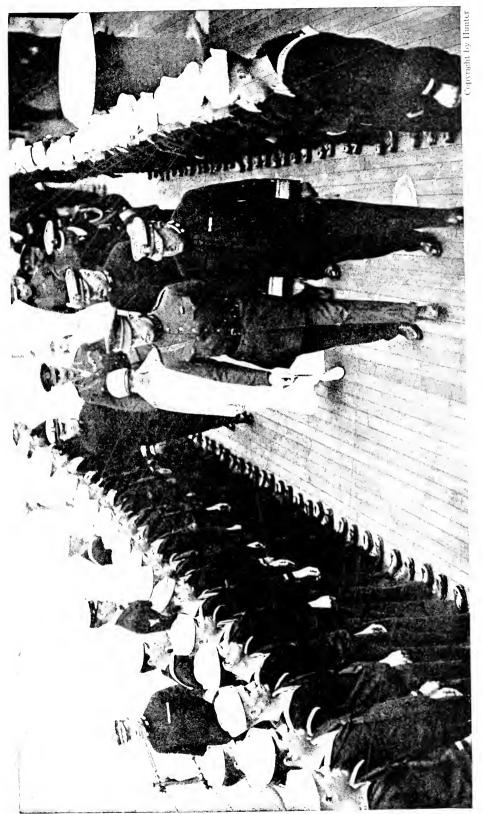
A Democratic Young Prince Who Became the Idol of Europe

X/HEN Albert was a young prince there seemed little chance that he would ever ascend the throne. His father, the Count of Flanders, was a younger brother of King Leopold II, who was quite young enough to have several sons, and who himself seemed strong enough to live many years. Moreover, Albert had an older brother, Prince Baudouin, who would naturally inherit the throne before him. So he lived a quiet, happy life, appearing seldom in the public eve, and no one ever imagined that their great poet, Maeterlinck, would ever have cause to say, concerning this silent, modest boy, "Of all the heroes of this stupendous war, heroes who will live in the memory of man, one assuredly of the most unsullied, one of those whom we can never love enough, is the great young king of my little country."

The early life of this beloved ruler was well fitted to develop the qualities of simplicity, sincerity, and real love

for his people that have made his subjects so adore him. In 1867 his father, the Count of Flanders, married the talented and charming Princess Marie of Hohenzollern. This royal couple had a very happy life, and devoted much of their time to their children, supervising personally their education, and giving them much of their instruction themselves. Sundays, the count and countess would walk with their children through the parks of the city or in the country near by, as unpretentiously as did the other citizens of Brussels.

In the summer the whole family and all the connections, with their respective guests, would move to the royal country palace, "Les Amerois," where they lived in an atmosphere of delightful informality. Until the war Albert kept this charming château for his summer home and kept up all its customs. One of these was the practice of giving alms to any beggar or needy person that might ask; consequently, there was



Inspection by the King of Belgium

King Albert and Queen Elizabeth are here shown inspecting Uncle Sam's sailors aboard the battleship New York. They were much impressed by the fine, manly appearance of the American sea veterans. The boys were equally pleased with Belgium's heroic king and queen.

a steady stream of mendicants winding its way up the hill to the château. Not only were entertainments planned for the guests and members of the family, but the servants, too, came in for their



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Queen Elizabeth of Belgium and Her Children

On the left is the heir to the throne, Prince Leopold, born in 1901. Holding his mother's arm is Prince Charles Theodore, the Count of Flanders, born in 1903. The little girl is their sister, the Princess Marie José, born in 1906.

share, and parties were constantly being arranged for the people of the nearby villages.

LEARNING TO BE A KING

When Albert was seventeen his brother died from a severe attack of pneumonia, and his education for the kingship began. He was sent to the Belgian Military Academy, where he was thrown with boys of all classes. Except for the fact that he did not sleep there, his life was the same as theirs; he ate the same food, attended the same classes, al-

though he did have some special instruction which they, of course, did not require, and even had the same amount weekly for pocket-money. He was accepted as a comrade by the boys from the start and became immensely popular.

He never for a moment lost sight of his career, and took everything regarding his preparation with the utmost seriousness. His tutors were the greatest experts in their respective lines that could be found. Prince Albert studied Latin, law, and political economy with Doctor Bosmans, the son of the president of the court of Louvain; French literature and rhetoric from M. Sigogne, a scholar and sociologist of great distinction; and Baron Lambermont, Belgium's most famous diplomat, instructed him in the science of diplomacy. Military tactics he learned from General Jungblüth, now chief of staff of the Belgian Army.

While Prince Albert received the conventional courses of instruction that were prescribed for most European princes, and while he made the customary tours in foreign countries, one is amazed at the eager use he made of every opportunity, and the scientific method with which he approached each subject. His whole aim seems to have been the all-absorbing desire, "How can I best serve and help my people?"

With this point of view, Prince Albert was never satisfied in getting the theoretical aspect and omitting the practical application. In order to fully comprehend the conditions of the lives of the miners, he went down into the mines himself and lived and worked with them. When Albert was in America in 1898 he made, under the guidance of Mr. James J. Hill, a thorough study of our railway systems, and in order to get into close touch with our peoples' lives he spent some time incognito as a reporter in Minneapolis. He has a large and well-founded technical knowledge

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and needs no chauffeur to repair his automobile

A JOURNEY TO THE CONGO

In 1909, the year he ascended the throne. Albert made an extensive journey through the Congo, that vast territory that Belgium had acquired under Leopold I. Taking only a small party, the prince covered the country, going by boat, on foot, horseback, on bicycles. Some of the other members of the party became exhausted and had to return, but Albert's iron constitution apparently could not know fatigue. Wherever he went he had great personal success, and not only did he charm the white colonists, but the natives as well, who called him "The Tall Man, the Breaker of Stones."

King Albert's home life is idyllic in its happy simplicity. In 1900 he mar-

ried the Princess Elizabeth, a Bavarian duchess, and it seems to have been one of those rare things, a royal love-match. The Queen won all hearts by her grace and quiet charm. She shares her husband's high sense of duty toward their subjects, and works indefatigably for their welfare. She, too, detests anything that savors of ostentation, and the King and Queen often make flying visits to London, where they stop, incognito, at some small hotel, do their shopping, go to the theater—in fact, do what they please.

Once, in London, the King was buying some automobiles. The salesman asked his name.

"Albert," said the King.

"Albert what?" asked the salesman.

"King," was the answer.

A little later the cars arrived addressed to Albert King, Esq., Brussels.

WOODROW WILSON THE BOY

How Our Great War President Spent His Boyhood

THOMAS WOODROW WILSON, twenty-eighth President of the United States, was born December 28, 1856, at Staunton, Virginia. He was not more than two years old when his family moved to Augusta, Georgia, where his father had been called by the Presbyterian church. The Reverend Wilson was a man of great force of character and a very magnetic personality. He was, moreover, a scholar, and instilled in his son the love of accurate expression and the feeling for words that so marks his beautiful literary style.

The future President's earliest recollection is of two men meeting on a country road and one of them saying, "Lincoln is elected; there'll be war."

But of the war itself that surged about his home he remembers little or nothing. Wilson's father was an ardent Southern sympathizer, and Tommy, as he was called, was brought up to share his father's point of view.

As a boy he lived the happy, care-free life that most boys lead. He remembers the excitement caused by the introduction of street-cars, the dazzling sparks that were struck from the wires at night, and the fascinating game of putting crossed pins on the track to have them turned miraculously into diminutive scissors by the passing of the car. He was a very active young man, and with his friend, Pleasant Stovall, organized a club among the boys called the "Lightfoot Club." The



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President Woodrow Wilson

He was the first President since Washington to give his messages to Congress in a personal address, and the first to negotiate a treaty on foreign soil. History will place him among our greatest Presidents.

meetings were carried on in strictest observance of parliamentary procedure in the club-room, whose chief decoration seems to have been a large picture of the devil, cut from an advertisement for deviled ham.

SPORTS AT SAND HILLS

They often used to ride out to Sand Hills, his uncle's home, a large country place that gave wonderful opportunities for playing Indian. This favorite game was made so realistic that the poor little darkies of the colored settlement in the piny woods were terrified almost out of their wits. His small cousin, Jessie Woodrow Bones, was allowed to play with the boys on the usual condition that is imposed on little girls by little boys—she had to do all the things they didn't want to do. When there was a battle she had to be killed; when they played Indian she had to be the squaw. Once, when the boys were being mighty hunters and Jessie was obligingly being a squirrel in a tree, Tommy aimed so well that the poor little squirrel came tumbling down. The terrified boy picked her up and bore her to the house, crying in stricken tones: "I am a murderer: it wasn't an accident. I killed her!"

Later he spent vacations at the home of Mrs. Amanda Fultz, which was called Fort Lewis, in Bath County, Virginia. Mrs. Fultz used to say of him that he was the most gentlemanly, considerate and lovable boy she ever knew. She told of the animated discussions he and his youthful companions had over the pronunciation and use of words, and how eagerly they consulted the dictionary. Many years later, when the President was asked about it, he said, "Yes, I remember that very well, and I also recall how Mrs. Fultz bought a new dictionary one summer and we used it so much with our soiled hands that by the end of summer it was all worn and black."

Wilson's schooling was not begun until he was nine years old, but by then he was familiar with many of the works of Dickens and Scott, for his father had the habit of reading aloud in the evenings, and took care to lay carefully the foundations for the boy's good taste in literature. He was sent to school to Prof. John T. Derry, a Confederate

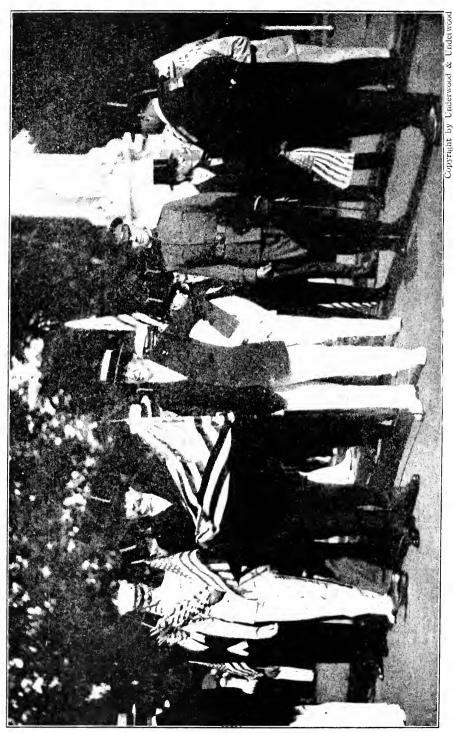


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President Wilson's Little Granddaughter A picture of Eleanor McAdoo taken on the occasion of her fourth birthday.

veteran and a very able teacher, but much of the boy's education was gleaned from his father. Father and son used to go every Monday afternoon on an excursion that would have some educational value; sometimes to a factory, sometimes to a machine-shop.

In 1817 his father was called to take the chair of Pastoral and Evangelical Theology in the Southern Presbyterian Theological Seminary, which was situated in Columbia, South Carolina, so the family left Augusta and moved there.



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Wilson Marches with Conscripts

"It is the call to duty to which every true man in the country will respond with pride and with the consciousness that in doing so he plays his part in vindication of a great cause, at whose summons every true heart offers its supreme service."—Draft proclamation of August 31, 1918.

THE FUTURE PRESIDENT AT COLLEGE

When Wilson was seventeen he went to Davidson College, in Mechlenburg County, North Carolina. There the life was simple and rigorous; the boys took care of their rooms, filled their lamps, carried up wood and water. It is said that Wilson broke the record for quick dressing and getting from bed to chapel. Baseball was a favorite sport of his and he had made the team. After a game in which the college nine had been defeated the captain laid the blame on Wilson, who had not been energetic enough to please him. "Wilson," he remarked, angrily, "you could make a dandy player if you weren't so damn' lazy!"

At that time reconstruction was at its height, and Wilson, living in the capital of the state, had plenty of opportunities to see its terrible effects. One day his class had the subject of Imaginary Radicals in algebra. Wilson was at the blackboard, floundering unhappily, since mathematics was not his favorite subject. Finally the professor remarked, somewhat impatiently: "Mr. Wilson, what is the matter with you? A man whose home is in Columbia ought to know all about radicals."

Instantly the expression of weariness left the boy's face and he replied, with a smile, "Unfortunately, sir, our radicals are not imaginary."

Wilson left Davidson and entered Princeton in the class of 1879. When he came to the university he was distinguished by an unmistakable quality of leadership, maturity of character, charm and finish of manner, and sound judgment. His mind was already set on a public career, not an unusual thing to find in an undergraduate, but it was accompanied by determination and perseverance. Much of his work was carried on outside the class-room; he knew what sort of preparation he needed,

and set out to get it. His non-academic interests lay along the lines of debating and publishing; he was a member of the Debating Society and one of its most able orators, and was on the editorial staff of the college magazine, *The Princetonian*. As a result of knowing what he wanted and going after it, he became an authority in a field outside of college work, and in his senior year he published an article in *The International Review*, on "Cabinet Government in the United States," that attracted an unusual amount of attention.

BEGINNING WORK

After graduating from Princeton in 1879, Wilson matriculated in the law-school of the University of Virginia. He stayed there only about a year and a half, however, ill health compelling him to stop work the Christmas of 1880. In 1882 he went to Atlanta to practise law, as it seemed to be a growing, prosperous town. It did not give, however, the opportunities he wished, and, becoming more and more interested in the theory of politics and jurisprudence, he decided to become a student and educator along those lines.

In the year 1883 he went to Johns Hopkins to do his post-graduate work. He spent two years there, after which he received the degree of Doctor of At Johns Hopkins he Philosophy. made a brilliant record, and before receiving his doctor's degree he was asked to join the Bryn Mawr faculty, where he went in 1885, still keeping a connection with the Baltimore university by delivering a course of lectures there. When he was finally launched upon his career as an educator, Wilson was in his thirtieth year. But the delay had not been disadvantageous, for he had laid down the broad and solid foundations upon which he now rapidly erected a commanding reputation.



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Field-Marshal Ferdinand Foch

"A battle won is a battle in which one will not own oneself beaten," he used to say. When the wat came he proved his statement.

FERDINAND FOCH

The Young Student Who Became the Leader of the Allies

FERDINAND FOCH was born October 2, 1851, at Tarbes, in the Hautes-Pyrénées. His father, Napoleon Foch, was an official in the Civil Service, and, as his post was changed from city to city, the children's education was somewhat interrupted. Ferdinand was sent to the College of Tarbes in 1862 and 1863, but the family moved to Polignac, then to Rodez, and in 1867 to Lyons, where the boy was put in the Jesuit College of St.-Michel. He decided to enter the army, and went to St.-Clément de Metz in 1870 to prepare for the Polytechnique, the great military training school at Paris.

Foch came home for his summer vaca-

tion with the prize for good conduct awarded by the students, expecting to resume his studies in a few months, but when the holidays were over classes could not reassemble, for Metz was then the center of the conflict that had broken out in July. Foch immediately enlisted to fight the Prussians. He was sent to Châlons-sur-Saône, and never saw active service. After he was mustered out he returned to St.-Clément to finish his studies. It was still full of German soldiers, a bitter sight to be endured by this young patriot, burning with the sense of his country's wrongs. took the entrance examinations for the Polytechnique at Nancy, where the German general, Manteuffel, had his headquarters. This general, with usual

Prussian tact and humor, ordered the

bands to play without ceasing the

French bugle-calls that meant retreat.

This humiliating sound made a lasting

impression on the young Frenchman,

and forty-two years later, in 1913, when

he was made commander of the Twentieth Corps of Lorraine, on his entrance into Nancy he ordered the bands of six regiments to play "Marche Lorraine" and the "Sambre et Meuse" until the old sad memory was blotted out.

Foch entered the Polytechnique at the saddest time in all its history. The scars of Prussian victory were still fresh, and in the spring came the horrors of the Communards, headed by Caillaux. Their uprising surged about that part of the city, and some of their shells, aimed for the Pantheon, struck the Polytechnique.

AN ENTHUSIASTIC SPIRIT

But nothing could quench the fire of enthusiasm that this ancient university with its brilliant record had kindled in the heart of young Foch. He went to the College of Navarre and to his amazement discovered, carved above the door, a quaint inscription that had been over the portals of his first school in Tarbes:

Siste domus donec fluctus formica marinos Ebibat et totum testudo perambulet orbem.

Which means, "May this house remain standing until the ant has drunk all the waves of the sea, and the tortoise has crawled around the world."

Another pupil who was at the Polytechnique at the same time was destined to become one of France's most famous generals, Joffre. Both Foch and Joffre went to Fontainebleau to the School of Applied Artillery, after graduation. There Foch finished the course third in his class, and returned to Tarbes to



French Sentinels of the Sky

These are French airplanes keeping watch and ward above the sector taken over by the American troops.

perfect his horsemanship. After two years, mostly spent in riding the fine animals that are raised in that part of the country, he went to the Cavalry School at Saumur. There he stayed until 1878, when he graduated, again high in his class, and as a captain in the Tenth Artillery went to Rennes, where he remained seven years.

The early life of Ferdinand Foch contained little that was spectacular, or that gave promise of the brilliant and heroic exploits he was to perform for France. He was a highly intelligent young man, possessed of an intense

power of determination and concentration. He knew what he needed and lost no time acquiring it. His whole life shows an unwearying study and preparation, so that when the time came he was ready, with consummate skill and daring, to achieve what seemed to be the impossible.

One of the most inspiring speeches in all history is the following brief message sent by Foch in the battle of the Marne, "My right wing has been driven in, my left has been driven in; therefore, with all I have left in my center I will attack."

WILLIAM II OF GERMANY

The Youth and Training of the War Lord of Europe

WILLIAM II, for over a generation, directed all the vast machinery of his Empire to a single end. He employed the mechanical, agricultural, and military genius of sixty million subjects to serve one colossal ambition—world conquest. It is difficult to determine how far the Kaiser's responsibility in the war is due to his own make-up, and how far it is the inevitable result of his training and the German military tradition.

In an absolute monarchy such as Germany, the personality of the ruler is of paramount importance, but it is almost impossible to comprehend the blind devotion of the German people to their Emperor, simply because he is Emperor. While William was still in the cradle he was made the object of a veritable cult.

His father, Frederick, had married the daughter of Queen Victoria and they were never in sympathy with the Berlin court. Their moderation, breadth of outlook, and progressive ideas were

very distasteful to the followers of Emperor William I and Bismarck, who hated and feared the introduction of anything resembling English tolerance. The childhood of William II was carefully watched by his parents, who did everything they could to instil their own point of view into the mind of the young prince, and, contrary to custom, he was sent to the Gymnasium, or preparatory school, at Cassel, where he stayed two and a half years, coming into close contact with other boys and living their simple, frugal life. This greatly displeased his grandfather, the Emperor, who thought that it lowered the dignity of a prince of royal blood to mix with commoners. His day at school began at six, when he had a simple breakfast of coffee and rolls, then followed study hours and classes, a walk with a tutor, and lunch. In the afternoon there were more studying and out-of-door sports and games. William's left arm was withered, some say from birth, and some think from an accident when he

was a baby, and this unfitted him for certain sports, but through training he was able to become an expert swimmer and a remarkable shot.

HIS LOVE OF THE ARMY

After he had completed the course at Cassel he entered the University of Bonn, which marked the emancipation



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Ex-Kaiser Wilhelm at the Age of Six

from his general and academic education. He now belonged to the army. Here was a life much more to his liking; the luxurious, easy-going life of the young military student centered in the Borussia, a corps to which only the sons of the nobility were admitted, where any struggling germ of the democratic ideals his parents had tried to implant was quickly stifled.

For William had never been in close

sympathy with his father, having always had far more admiration for his grandfather's militaristic and autocratic ideas.

The army had for him, from his earliest childhood, a tremendous appeal; at six he first formed the habit of saluting; at ten he was enrolled in the army as a second lieutenant in the First Foot Guards, and the following year, when his regiment left for the Franco-Prussian War, he, its youngest officer, wept bitterly because he was not allowed to go with it into action. When the troops returned victorious he took part in a parade when they were reviewed by the Emperor, William I, who was giving an address to praise the work of General von Werder. He addressed part of his speech to the young prince: "As for vou, Prince Frederick William, to-day you have for the first time drawn your sword among your troops. I cherish the memory of the oldest officers of this regiment, and I trust that you will bear your sword in its ranks to an advanced age. May you also one day, after as long a period of service as General von Werder's, look back upon a new and brilliant chapter of the history of this gallant regiment! May the same good fortune befall you as befell the general in 1866!"

William left the University of Bonn October 29, 1879, and took his place as an officer in the First Regiment of the Guard. He was devoted to army life and performed his duties with great thoroughness and strictness. Not content with maintaining discipline in the official lives of his men, he attempted to exercise authority over their private lives. Upon learning that there was an inordinate amount of gambling among the officers, he placed them under arrest, and, after dismissing some of them, tendered his resignation as colonel, which, however, his grandfather refused to accept.

HIS MARRIAGE AND ACCESSION TO THE THRONE

In 1881 William married Princess Augusta Victoria, of Schleswig-Holstein, a marriage approved by the court, as the princess's conservatism and conventionality were all that could be desired. She had done a great deal to help make Berlin a citadel against progress and liberty. Then followed six vears of domestic, semi-independent life, during which William devoted himself to his military routine and public duties.

On the 9th of March, 1888, Emperor William I died at the age of ninety-one. He was succeeded by his son Frederick III, who, if he had lived, would no doubt have inaugurated a period of greater political liberty; but he was already a dying man, suffering agonies from cancer of the throat. His reign lasted only three months; he died in June, and his son, William II, was proclaimed Emperor. The new ruler was then twenty-nine years old, a man of very active mind, of fertile imagination. ambitious, and self-confident. His first act was the issuing of two proclamations, one to the Army, one to the Navy, extolling militarism, containing a eulogy of his grandfather and a few words about his father. The address to the army ended, "Thus we belong to each



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The ex-Kaiser at the Age of Sixteen

other, I and the Army; thus we were born for one another, and firmly and inseparably will we hold together, whether it is God's will to give us peace or storm."

ROYAL CHILDREN OF EUROPE

Little Princes and Princesses and How They Lived When War Broke Over Europe

IN these times a prince's life is a very uncertain one, for, as kings become more and more unpopular, princes become more and more insecure. No doubt you have often thought, when compound interest seems a great bore, or mother suggests that you might help with the dusting or watch baby for a while, that it would be ever so pleasant to be a prince or a princess, or even a young duke, so that you could do just as you please and every one else would do just as you please. But just suppose that one day the neighbors decided that your father's house was too nice for your family, and the yard where you play was larger than you needed, and so they simply moved the fence in, right up to the kitchen door, and chopped off the front porch, and perhaps the



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The Royal Children of Italy

A picture like this one was presented to every soldier in the Italian Army, and it was an inspiration to the men, for the royal children are held in great esteem by the soldiers as well as throughout the country.

roof, and broke a good many windows. You'd call the policeman, would you? But there wouldn't be any policeman. And your poor father would be so discouraged he would just resign, only kings call it abdicating. And this is what the Emperor of Austria did.

Or suppose your father had a number of enemies. Now you haven't the slightest idea of what it is like to know that there are people who are constantly doing all that they can to get rid of you and your family so that they can have your houses and lands and your mother's jewels and your father's titles; and suppose these enemies be-

came so strong that they broke into your home, killed the servants, and dragged you away to a very black, cold prison where they kept you for a time and then one night killed you and your father and mother and all of your sisters. For this is what has probably happened to poor little Alexis, the former Czarevitch of Russia.

THE HAPPY LOT OF ITALY'S YOUNG PRINCES

Of course, such sad and terrible things do not happen to all princes. In Italy the children of the King and Queen have a very good time indeed. That is



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Queen Elena of Italy

partly because Italy is a very democratic place where people do not think that being born in a palace makes one different from everybody else, and partly because they have such a lovely mother. Queen Elena was a great tomboy when she was a girl, and liked nothing better than hunting boars, which she did very skilfully. The wise Italian statesmen shook their heads when the wedding was announced, for they thought that queens shouldn't gallop through the woods on wild horses, and, besides, they rather looked down on her country, Montenegro. But since she became such a charming queen, and is so universally beloved, and has five such delightful children, they cannot find any fault at all. Umberto, Prince of Piedmont, is fifteen. He has one older sister and three younger, but he must be mentioned first, for, as you know, in royal families the boy is the really im-



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Prince Umberto

The only son of King Emanuel, and heir to the Italian throne.



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The King of Italy's Daughter Princess Yolanda, the eldest daughter of King Emanuel and Queen Elena.

portant one; in fact, it is quite a disgrace when all the children are girls. The children are all artistic; Yolanda, the oldest, sings very beautifully. The palace must be a delightful place. But they're very glad, especially Umberto, when it's time to go to their country place, Racconigi, where the Queen insists on their playing tennis and riding and doing all of the out-of-door things that you do in the summer.

KING ALBERT OF BELGIUM AND HIS FAMILY

Albert, the young King of Belgium, is probably the greatest hero of the war; a soldier, who fought for his people and for the whole world with his little army that couldn't understand words like "retreat" or "surrender" and held back the hordes upon hordes of Germans until France and England could get their armies mobilized. No wonder the Belgians and, indeed, all the Allies, adore him. The Queen is as devoted a mother to the whole country



Princess Mafalda

Second daughter of King Emanuel and Queen Elena.



Princess Maria
The youngest daughter of the Italian royal family.



Princess Marie José
Her royal highness of Belgium.



Princess Giovanna
The third daughter of the King and Queen of Italy.

as she is to her own three children, and spends most of her time in the hospitals or doing other kinds of relief work. The son, Leopold, is a remarkably handsome boy, tall and fair like his father. He was very proud to be considered old enough to join the "Twelfth" and go into the trenches with the men.

THE TRAGEDY OF THE ROMANOFFS

The children of the imperial family of Russia, which, as you know, is no longer imperial, but is called merely "the Romanoffs," have had a tragic life. Shut up in the somber Winter Palace at Petrograd, the four lovely grand duchesses, Olga, Tatiana, Marie, and Anastasia, with their nervous, frail little brother, Alexis, have had very little chance for fun.

The etiquette of the Russian court was very strict indeed, which meant that there were so many things that royal children could not do that it left very few things that they could do. Besides, they had to be closely protected



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Prince Leopold of Belgium



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The Former Czarevitch

and watched, for the unrest that finally brought about the revolution was constantly breaking out in an alarming way. So the palace was full of guards, and in the parks, where the children might play, savage-looking Cossacks were incessantly galloping about on their fierce ponies, which didn't make it a very cheerful place. They must have enjoyed Tsarskoye - Selo, the country palace, much more, for there they could escape some of the formality of the life in Petrograd. But they could never escape the countless plots and intrigues that hung so thickly about them.

Their mother was a strange, cold woman, of much more personal force than the amiable but rather weak Czar. She had been a German princess and had never made any real effort to understand or sympathize with the Russian people, so that she was regarded with little love and deep suspicion, and many believe that she helped betray Russia into Germany's hands.

At any rate, she was a nervous, superstitious person, a great believer in the occult and supernatural, so that she was played upon by many unscrupulous and wicked people. Her devotion to Czarevitch?" The boy was found in a nearby room, reading at the great center-table, over which was suspended an enormous crystal chandelier. The monk threw himself upon the Czare-



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The Late Czar and His Family

The Czar, the Czarina, the Grand-Duchesses Olga, Tatiana, Marie, Anastasia, and the little Czarevitch Alexis.

the little Czarevitch, who was a delicate child, put her completely in the power of a terrible man, a monk called Rasputin, who claimed to have a strange power over the little boy. Whenever the monk went away Alexis would fall ill; due, no doubt, to clever poisoning on the part of Rasputin. One day when Rasputin was in the Czarina's apartments in the palace he suddenly turned very pale and cried, "Where is the

vitch and dragged him away just as the chandelier came crashing in fragments to the floor. The Czarina was overcome with gratitude and never knew that it was all the result of careful planning, for a contrivance had been fitted up whereby, at a sign from Rasputin, one of his confederates touched a lever and caused the huge mass of crystal to fall.

The Czarevitch was born in 1904, the

youngest of a family of five. As all the others had been girls, his birth was hailed with the greatest enthusiasm, which gradually became touched with apprehension, for he developed a strange disease, an affection of the blood-vessels which would bring on terrific hemorrhages that sometimes would last several days. As these attacks might be brought on by the slightest cause, a bruise, a knock, or even a fit of temper, the boy was given his own way and, consequently, was badly spoiled. He was an intelligent, handsome boy, but

charming girls, about whom not much is known because of their secluded life. Their mother never seemed to be very close to them and always felt a faint resentment toward them because they hadn't been boys. Olga, the oldest, is twenty-four. She is very musical, and not only plays extremely well, but also composes. Tatiana, the second, is the most vivacious. She especially resented her mother's objections to the girls' need of amusement and longed for the pretty clothes and jewels that were forbidden. However, when the war came



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Two of the Czar's Daughters

The Grand-Duchesses Marie and Anastasia at the St. Theodore Hospital in Tsarskoye-Selo, at the bedside of wounded soldiers.

his education had to be most irregular, his chief tutor and companion being a peasant-soldier, Sergeant Derevenko, to whom the boy was deeply attached.

The grand duchesses were unusually

she and her older sister set fine examples of self-denial. They and their mother took training courses in nursing and went into the hospitals, where they worked indefatigably. Tatiana was es-

pecially efficient as head of a relief committee which did splendid work, and when money was needed she sold a beautiful pearl necklace, a present from her father.

After the revolution, when the royal family were imprisoned at Tsarskoveafter she had never hurt any one and had worked so hard to help the soldiers and their families. The two younger ones, Marie and Anastasia, were too young to fully comprehend the terrible misfortune that had happened to them. and could only cling to their mother.



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The Last Photo Ever Taken of the Late Czar and His Family

Showing Nicholas about to enter St. Theodore's Cathedral to attend a religious service. At his side is the Czarevitch Alexis. Immediately behind are three of his daughters, the Grand-Duchesses Marie, Olga, and Tatiana.

Selo, the two girls behaved wonderfully, showing great courage and apparently understanding the full significance of the situation better than their parents. Olga said, "If the Germans get near to Petrograd, or if a new revolution breaks forth there, we shall be its first victims, and either the mob or the government will put us to death." Tatiana revolted against the terrible She could not understand injustice. how she could be treated so harshly

who for the first time showed some of the devotion she had never before given When the Czar and her daughters. Czarina were ordered to Siberia, the grand duchesses were given the choice between remaining at Tsarskoye-Selo and accompanying their parents. Without a moment's hesitation they decided to go with their father and mother into exile. Tobolsk, where they were to go, is one of the worst places in Siberia. It is a village made up of political exiles

and prisoners of the most desperate type, together with some Yakoutes, savage, half-civilized nomads. And to this living death the former Czar of all the Russias, once Emperor of the richest, largest country in the world, was consigned until his assassination.

THE MILITARY LIFE OF YOUNG GERMAN PRINCES

In no other country is the importance given to military training that is given in Germany. The young princes are trained to command and obey from the time they can walk. Even their schoolrooms seem like barracks. The Crown Prince of Saxony and his brothers Frederick and Ernest are impressed daily with the idea that they will one day be military rulers and they are never for a



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Three Generations of German Royalty

The Empress of Germany, the Crown Princess, and her
little daughter, Princess Alexandrina Irene.



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The Prince of Wales

In the uniform of a lieutenant of the Royal Navy.

moment allowed to forget their own importance. Crown-Prince George's first thought, on seeing a French fort and French soldiers drilling, was, "How easy it would be for a German war-ship to destroy them."

All the games which they played were games of war. They even divided the palace park into three parts, a kingdom for each. Ernest's domain was not so large as the others, but he was not alarmed, for he said that his future was on the sea. The Kaiser himself sent the boy a collection of magnificent toy ships and he spent all of his time studying and reading about sea-fighting. At Christmas-time, when we write letters to Santa Claus, Saxon boys and girls write to the little Jesus. The prince's letter was very short; it said, "Little Jesus, I want submarines.—Prince Ernest, Duke of Saxony."

A ROYAL FAMILY-MOSTLY BOYS

The life of King George of England and his family is a happy contrast to the sad misfortunes of his cousin, the former monarch of Russia. The King is extremely popular and the Queen is deeply respected and admired. Here is a royal family with lots of boys; the Prince of Wales, Albert, George, and John, and one girl, the Princess Marv. The Prince of Wales, who is twentyfour, has a great many more titles; in the peerage of England he is Earl of Chester and Duke of Cornwall, and in the Scottish peerage he is Duke of Rothesay, Earl of Carrick, and Baron of Renfrew, as well as Lord of the Isles and Great Steward of Scotland. the proclamation of King George in 1917 he lost the German titles, Duke of Saxony and Prince of Saxe-Coburg and Gotha, which the King gave up when he determined that the royal family of



The Prince of Wales

At the age of sixteen, when he was created Prince of Wales in June, 1910. At his side is his sister, Princess Mary.



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Prince Albert Frederick

Known, on account of serving in the Navy, as the Naval
Prince of England.

England should be called the House of Windsor. The Prince of Wales, unlike many kings' sons, has been very fortunate in receiving an education which has brought him in close touch with lots of other English boys of his own age, of all kinds and rank, so that he has gotten to know his people in a very personal way and is much loved by them.

He is rather quiet, but has a keen sense of fun, and detests anything like "side." At the coronation the princess was much impressed with her elaborate robes of state and was accordingly giving herself a few airs, but her brother upset her dignity with a, "Get in, you old silly!" and a shove as he put her into the royal carriage. On that eventful day a playmate of Prince Albert's, the young grandson of the Duke of Abercorn, was given the responsible position of train-bearer to his grandfather. He was so excited at this great honor that he was attacked by a violent



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Prince Albert of England

The prince is shown on the left. On his right is Major Creig of the Royal Air Force, who piloted the plane in which Prince Albert flew to France in the winter of 1918.

nosebleed, which for a moment threatened to break up the procession, but, being a boy of some presence of mind, he carefully confined the crimson flow to the red velvet of the train, and skilfully kept from spotting the ermine edge.

There has always been a close connection between the royal family of England and its royal navy. William IV said, "There is no place in the world for making an English gentleman like the quarter-deck of an English man-of-So when the prince was twelve and a half years old he was sent to the Royal Naval College at Osborne, where, as Edward of Wales, he lived the simple, busy life of all the other boys, from the cold tub at a quarter of seven till bedtime. Two years later he went for another course of naval instruction at Dartmouth, and in 1911 he went as a midshipman on board the Hindustan. After this cruise Captain Campbell, commander of the ship, said of him, "The prince has, throughout the whole period of his training, been an extremely hard worker and has struck all those about him, high and low, as what we call a 'live thing.'" For his eighteenth birthday the prince received a commission in the Army and a lieutenancy in the Navy. He had been for some months in France, learning the language, which he speaks with perfect



From Lestie's Heekly

Prince George

ease, and getting to know the French people, whom he admires tremendously. He returned to enter Oxford. His courses of study there had to be carefully planned, as he had not the full time to give that is usually required. He studied French, German, English, history, economics, and constitutional law. He proved to be studious and a conscientious worker, but nothing of a grind. He was very popular with the men and went in for all sorts of sports football, tennis, golf, motoring, hunting, boating. At the outbreak of the war the prince was miserable until he could get into it. He had great difficulty in overcoming Lord Kitchener's opposition, but finally was sent. Not content with a job at headquarters, he insisted upon going into the trenches to take his chances with the rest of the men. A private of the Coldstream Guards in a letter said of him: "I must tell you about the prince, who is here with us. I can assure you he is as brave as a hero. Only last night he passed me when German shells were coming over. You can take it from me that he is not only the Prince of Wales, but a soldier and a man, and we are all proud of him. He is not very big, but he has got a bigger heart than a lot who are hanging back in Great Britain."

THE LUXURY OF BEING A RAJAH

A great contrast to the simple lives of the English royal family is the luxury that surrounds the native princes of England's great possession, India. They are allowed to rule, to issue their own currency and postage, and make their own laws, as long as they are faithful and loyal to England. These princes, who are called rajahs or maharajahs, are very proud of the antiquity of their families, and some trace their ancestors back to the sun; others can only get as far back as the moon. They are sur-

rounded by servants to dress them, fan them, attend to every wish. When they drive they are accompanied by an



British and Italian Royalty

The Prince of Wales at the left, and King Emanuel at the right, are discussing the war situation on the Italian fighting front.

escort mounted on magnificent horses, and all the people bow down to the ground. One prince so disliked to be hot that he had a silver couch hung from the ceiling by silver ropes and servants that kept it gently swinging, while artificial rain kept falling on the



On July 4, 1917, American Sailors in England Played a Game of Baseball at Chelsea

King George was the first British sovereign to attend a ball game; such an act heretofore was called an act of rebellion, but the war has made nearly every one more democratic. Admiral Sims is introducing King George to the captain of the American Army team.

marble canopies around him. Many of them have English tutors and are brought up as European boys. There are several colleges in India under the supervision of English professors, and many of the princes go to Oxford and other European universities. They are fine athletes, and play polo especially well, as they are generally remarkable horsemen. The situation in India is not an easy one, but the English are handling it with such tact and sympathy in allowing the natives to keep

their own institutions and forms of government, and at the same time introducing all sorts of improvements, railroads, hospitals, better sanitation, and schools, that the people of India are contented and happy under the English administration. The most striking proof of their loyalty and patriotism was the splendid way they responded to England's need in the war by sending thousands of native troops, who fought with the greatest courage and gallantry.

THE SPIRES OF OXFORD

By Winifred M. Letts

I SAW the spires of Oxford
As I was passing by,
The gray spires of Oxford
Against the pearl-gray sky.
My heart was with the Oxford men
Who went abroad to die.

The years go fast in Oxford,
The golden years and gay;
The hoary colleges look down
On careless boys at play.
But when the bugles sounded war
They put their games away.

-From The Spires of Oxford and Other Poems, by Winifred M. Letts. Copyright, 1917, by E. P. Dutton & Co., New York.

They left the peaceful river,
The cricket-field, the quad,
The shaven lawns of Oxford,
To seek a bloody sod—
They gave their merry youth away
For country and for God.

God rest you, happy gentlemen
Who laid your good lives down,
Who took the khaki and the gun
Instead of cap and gown.
God bring you to a fairer place
Than even Oxford town.
Copyright, 1917, by E. P. Dutton & Co., New York.

IF By D. H. W.

In The Trouble Buster (U. S. General Hospital No. 2, Fort McHenry)

F you can hold your head up while the others Are drooping theirs from marches and fatigue; If you can drill in dust that clouds and smothers, And still be fit to hike another league; If you can stand the greasy food and dishes, The long black nights, the lonesome road, the blues; If you can choke back all the gloomy wishes For home that seem to spring right from your shoes; If you can laugh at sick call and the pill boys, When all the other lads are checking in; If you can kid and jolly all the killjoys, Whose faces long ago forgot to grin; If at parade you stand fast at attention, When every muscle shrieks aloud with pain; If you can grin and snicker at the mention Of some bone play connected with your name; If you succeed to keep your knees from knocking At thoughts of all the bullets you may stop-If you can do these things and really like 'em, You'll be a reg'lar soldier yet, old top.

IV. THE FIGHTING-MEN

UNCLE SAM'S SCHOOL

Making Cities to Order and Soldiers to a Pattern

WHEN Uncle Sam decided to raise his vast citizen army he was faced with the staggering problem of housing the men during their period of training. We can imagine him summoning the quartermaster-general for a conference on the matter and giving him some such directions as these:

"I have placed in the Treasury, subject to your order, a sum of money equal to all the gold produced by all the mines of the world during the past year. With it you are to build sixteen cities large enough to accommodate the combined populations of Arizona and New Mexico, with enough stable room to take care of as many horses as there are in the state of Oregon. You must equip them with enough hospitals to hold as many people as in normal times are in the hospitals west of the Mississippi. And at the same time you must erect and furnish the two immense concentration camps from which our boys are to embark.'

TWELVE HUNDRED MILES OF NAILS A $$\operatorname{DAY}$$

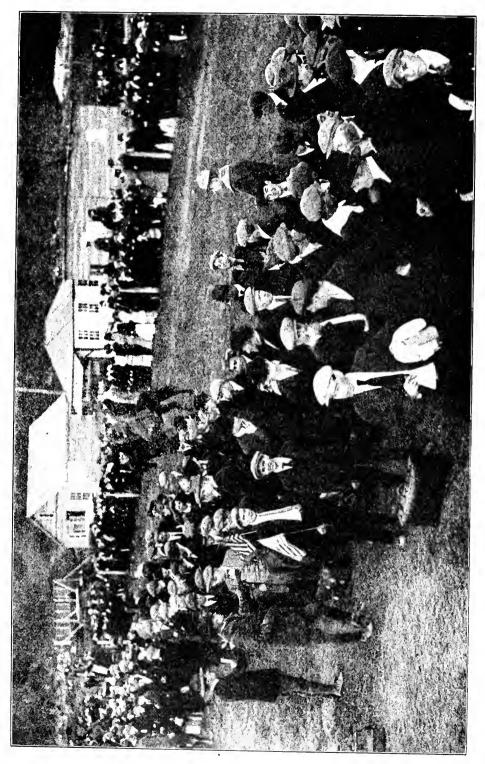
The quartermaster-general, who was a good soldier, didn't waste any time saying, "We'll try," or, "Perhaps"; he went right ahead and executed the order to the letter. To the tune of 25,000 hammers driving home 1,200 miles of nails every day he used enough lumber to make a boardwalk four feet wide from Palm Beach to Bagdad via the Bering Straits and the Arctic Circle. His ex-

penditure during one month amounted to \$52,000,000, nearly nine tons of gold.

What do these mushroom cities look like; what kind of buildings could they put up so hastily; where did they get their water-supply, their electricity? In a standard cantonment city the buildings and spacings, if placed in a straight line, would stretch about three miles, or as far as from Madison Square to the Battery. For economy of space, however, they were arranged in the form of the letter U, with the train areas at the closed end, the whole covering sixteen long city blocks by eighteen short ones.

The unit of the camp is the barrack, the home of the soldier. It is made of wood, one hundred and twenty feet long and forty-three wide, two stories high, with a low pitched roof covered with a fire-proof sheeting. At one end a twenty-foot, one-storied kitchen runs the full width of the building. Half of the lower floor is given over to the mess-hall with its tables and benches. There is also a twenty-foot company hall, an entrance, and a stairway. The rest of the floor and the top story are fitted with the bunks and lockers of the men. The record for the erection of a barrack is held by Camp Pike, at Little Rock, where one morning at nine work was begun and by 11.55 the building was completed, scaffolding down, litter cleared away, windowscreens fitted, and workmen gone.

In every camp there was a complete lighting and power installation. Some-



Building the National Army

Is your brother or somebody you know in this picture? Most likely he isn't, but he might just as well be, because it was in just this way that America had to start to build up almost overnight a great big army which could meet the army Germany had taken years to make.



First Drill of the Dartmouth Regiment

times the power could be brought from the nearest town; sometimes a plant had to be erected at the camp.

Remarkable feats of engineering were performed in supplying the camps with a plentiful water-supply and a system of filtration that eliminated the dreadful scourge of typhoid fever, heretofore so fatal in army camps. A backwoodsman from the Red River district arrived at a camp, parched with thirst after walking miles and miles, and made for a drinking-fountain he saw near by.

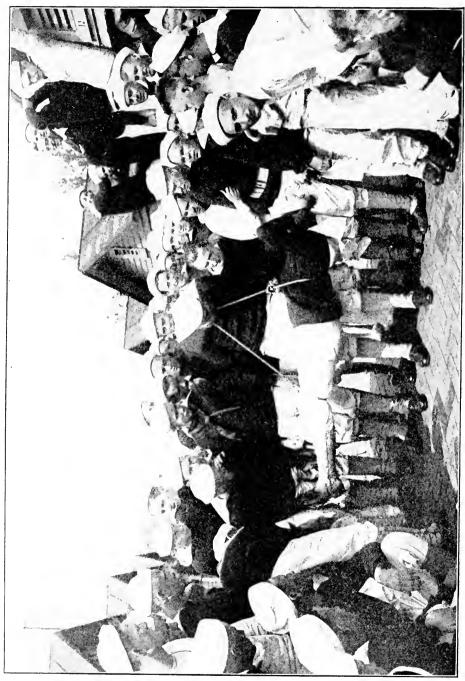
Accustomed to the water of his region, which is never paler than a decided écru, he was quite unprepared for the crystal-clear stream that bubbled up. He gazed at it with deep disappointment and sadly turned away, remarking: "That thar ain't water. Reckon I knows it when I sees it. Water's yaller!"

THE FIRST DAY

Jeff was unusual; there weren't many who lived so far from what we call the



A Machine-gun Squad, Cornell



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The Strong Man of the Camp

Every training-camp in the country has its strong man, but the United States Naval Training Station at Norfolk, Virginia, claims the champion of that class. He can lift a husky man with his teeth.

world as he did, but a little of his perplexity must have been felt by some of the men who were summoned to come and learn how to be soldiers. You see, Ieff Bledsoe was a Tennessee mountaineer who may have heard in a vague way that there was a war; but who was in it, or the fact that he was going to be affected by it one way or another, had never entered his mind. He enrolled at Camp Jackson under the impression that he was being called to account on a charge of moonshining, and sullenly refused to answer any of the questions that an exasperated officer was putting to him. Finally the whole situation was explained; instantly his sullenness vanished. "Huh!" he exclaimed. "I allowed hit wuz a cou't. I ain't afeard to fight. Get me a gun, Capt'n, and I'll project around and bring you in one of them Dutchies afore sundown." Ieff had little trouble with a rifle, although a modern high-powered infantry rifle was a violent change from the old '73 Winchester that hung on his cabin wall. Life in the barracks, however, was a tremendous shock. This matter of living with one hundred and ninetynine other men, of having the rooms lighted by lights unbelievably bright that couldn't be blown out, of turning a little handle and seeing a stream of water pour out-all of these were sources of constant amazement to leff.

THE DAY'S WORK

At 5.40 A.M the first call was sounded; that meant that the buglers were assembling, getting ready for their unpopular task of arousing the soldier, and that the Stars and Stripes was being raised to the top of its flagstaff. Fifteen minutes later reveille rang out:

I can't get 'em up, I can't get 'em up,
I can't get 'em up in the morning;
I can't get 'em up, I can't get 'em up,
I can't get 'em up at all.

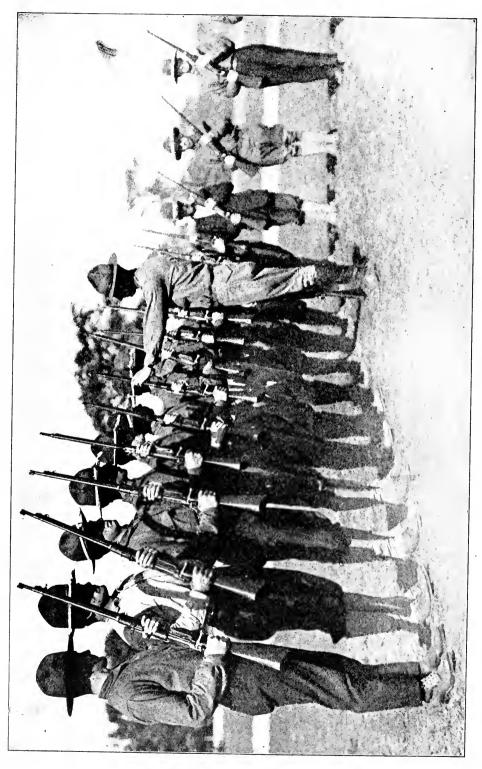
Corporals worse than privates, Sergeants worse than corporals, Lieutenants worse than sergeants, Captains worst of all.

Assembly followed at 6, when the roll-call was taken by the first sergeant. Then came a short setting-up drill, and at 6.15 the ever-welcome mess-call for breakfast:

Soup-ee, soup-ee, soup,
Without a single bean,
Pork-ee, pork-ee, pork,
Without a streak of lean,
Coffee, coffee, coffee,
Weakest ever seen.

This time-honored song is not strictly accurate, however. The American soldier had the most liberal rations of any fighting-man in the world. His breakfast very likely consisted of apples, Irish stew, hot cakes and syrup, butter, bread, and coffee. The soldier's meal was technically known as mess, but to him it was always chow. The mess-hall had a counter at one end and the boys formed a long line, plate, cup, knife, and fork in hand, very much in the manner of the well-known cafeteria.

Assembly sounded at 7 and the morning work proper began. Until 11.30 the soldier-student had a great deal to do. His instruction was divided into several schools. First came the School of the Soldier; this comprised what a man must learn as an individual, and included the position of the soldier, facings, how to march, and the manual of arms. A soldier must stand with head erect, eves front, chin up, shoulders square, hips level, arms and hands hanging naturally, knees straight without stiffness, heels together, and feet at an angle of forty-five degrees. In civil life a man may walk any way he likes, who cares? But the minute he gets in the army he realizes that uniformity demands that all men shall move as



A B C's of "The Manual of Arms"

Have you ever played soldier with wooden guns? If so, maybe you know what command the officer has given these soldiers to get them to hold their guns this way. It is a very simple command, but the new soldier has to be taught how to do the little things before he can go into the big battle.

one, so he shortens or lengthens his step until it is thirty inches long and he learns to take one hundred and twenty a minute. He discovers, too, perhaps by sad experience, that on the march it is necessary to wear shoes a half-size larger than those he is accustomed to. The manual of arms is to make the soldier perfectly familiar with his best friend, his rifle; it must become a part of him.

The School of Squad was the next step. A squad is composed of eight men, a corporal and seven privates, who work together as one man. It is the unit upon which the company depends. In the instruction that came under this head the doughboy learned alignments, turnings, movements, also loading and firing.

After this step had been mastered he was ready for the School of the Company, an amplification of the work in the School of Squad, where several squads were grouped together to drill.

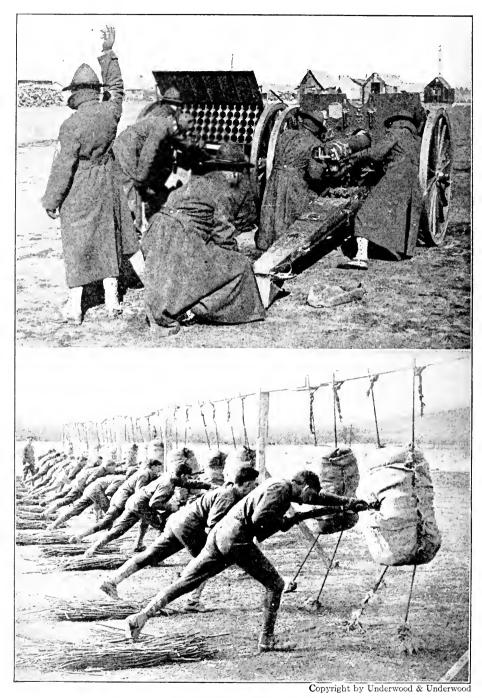
The doughboy was prepared as completely as possible for the real battlefield by the reproduction at the camp of the various things he was to meet later in a more sinister form. You might see him in bayonet-drill attacking a dummy with all the ferocity he would display toward a real German; his trenches were exact duplicates of the ones he was to occupy in France; guarded by a gasmask, he entered the grim lethel-house filled with yellow clouds of chlorine gas. Fortunately, the hand-grenades the boys practised with were filled with sawdust instead of gunpowder. One boy blew himself to pieces, theoretically, the first time he handled one, for the machine explodes five seconds after the pin is removed, and seven seconds after, this young man was gazing at it hypnotized.

After the hard work of the morning, the noontime chow was more than welcome. It was followed by a short rest period that lasted until 1.30. Then the

afternoon work commenced. It combined active and strenuous exercise with classes and instruction. The work varied according to the needs of the various companies: sometimes there was a piece of road to be built, sometimes a hike to be taken, sometimes the men took lessons in map-making or gunnery. The afternoon usually included, also, special talks from the officers on personal hygiene, care of equipment and clothing, and general explanations of the use of gas and bombs, or lectures on the courtesies and customs of military service, and the rights of prisoners of war.

After 4.30 our soldier was free. Perhaps he used some of the precious time to bathe and shave, these being denied him in the morning, due to pressure of time; or perhaps he went over to the "Y" and wrote home, perhaps he went to the movies, or perhaps he just wandered up and down the streets-for a camp is a town—into the post exchange and out again, watching the crowds and interchanging talk. His time until taps was his own, except for the few moments at sundown when the thousands gathered and retreat was sounded; then, with the band playing "The Star-spangled Banner" and every man at salute, the flag was lowered.

This was his schedule for the weekday; but Saturday was different. A half-holiday it was decreed. But that did not mean always loafing. For the soldier, you must remember, had to do his own laundry, and if he had neglected it during the week, which he probably had, Saturday afternoon became washday. Everything must be clean for Sunday and "inspection." So out to the scrubbing-tables back of the barracks he went, armed with brushes and soap. There he spent part of the time working and scrubbing, and the rest of the time guarding his clothes as they dried in the breeze, for if he deserted them for a



National Service Men Learning Their New Trade at Camp Doniphan, Oklahoma

Artillerymen waiting for the command to fire. Below—Men of the non-commissioned officers' school practising the "short-point jab" with the bayonet.

moment—who knows?—he might be minus an undershirt for the next week.

The soldier in the training-camps followed the custom of the rest of the United States: Sunday was his restday. That day he looked forward to, for he might get a pass; and then it

is a fire unit and is commanded by a sergeant or a lieutenant. The company, which is the basic tactical unit of the army, contains four or more platoons and its commanding officer is a captain. Four companies, commanded by a major, make up a battalion; and a



Ready for the Call—Brown University

would be good-by to the camp for twenty-four hours for a glimpse of the non-military world, the fun of the city, or even home with Sunday chicken and ice-cream among the admiring glances of his family.

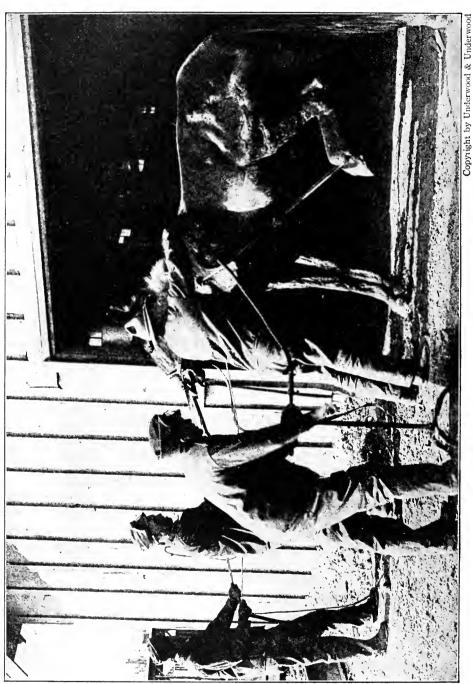
But however he used his playtime, that bugle the next morning at 6 would sound itself into his sleep, commanding him to get up, and quick about it, too, to begin the week's work.

ORGANIZATION

We have spoken of the squad, the unit upon which the company is built, made up of seven privates and a corporal. A platoon is next in size; it is composed of three or four squads. It

regiment, under a colonel, is composed of three battalions.

Between the officers and privates there exists a very cordial relationship resembling the French idea, where the officer is always "Mon capitaine" to the men, and the men are "Mes enfants" to the officer. One day in camp a new corporal was reporting to his captain the results of the roll-call. He was very earnest about it, but not exactly according to strict military regulations. At the time the men were standing at attention when not a sound could be made, nor a movement. "Captain," said the corporal, "I've had the divvul's own time locating me men. Flaherty he do be in the kitchen peeling potatoes. Hogan he do be over to



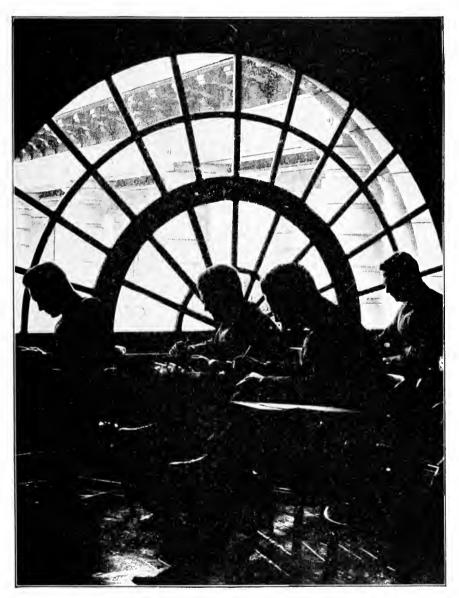
The Spring Hair-cut

This Missouri mule, doing his bit at Camp Dix, evidently dislikes having his shaggy winter coat removed. The operation, as will be seen, necessitates the combined efforts of four men.

the hospital, but I'm thinkin' there's a bit o' blarney to Hogan's bein' sick. Jones is out diggin' a trench like any Dago—bad cess to 'em. And the other three laddy bucks, the divvul knows where they are!" The captain was controlling himself by a mighty effort, and on looking at the men he found

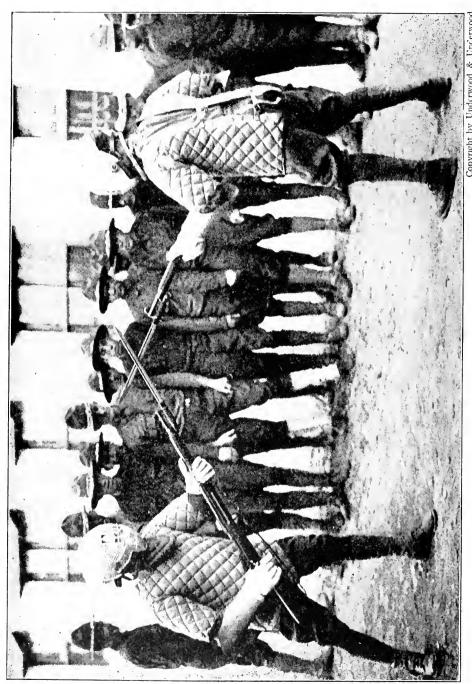
them ready to explode. He commanded, "Rest!" which allowed them to do what they pleased. A mighty shout of laughter arose.

This officer was too wise to miss a chance that would establish a bond, however small, between him and his men.



The First Class at Annapolis

It is quiet and studious here, but it is in quiet and study that great fighters are made. These are the men who later distinguished themselves as naval officers.



A Bayonet Drill

National Army men at Camp Dix, equipped with masks, shields, and heavy gloves, showing their comrades how it is done.

EQUIPMENT

The cartoonists have taken great delight in showing how the recruits looked when they tried to wear the uniforms that were issued them. There were, no

should become separated from his company. This total load with the clothes he wears is fifty to seventy pounds. The number of articles is surprisingly large. They are so devised, however, that by ingenious methods of packing and ad-



Trench-work at Stanford University

doubt, some very strange sights at first, but after some readjusting the results were highly successful.

The chief fighting-tools are a rifle, a bayonet in a scabbard, a cartridge-belt, and an intrenching-tool. The rifle is the soldier's closest friend and must be cared for if the soldier expects it to care for him in time of emergency. The amount of ammunition carried is usually 220 rounds, so that every shot is made to count. In modern warfare the intrenching-tool is an essential part of the fighting equipment. The eight men in each squad carry these eight tools: 4 shovels, 2 pick-mattocks, 1 polo or hand-ax, and I wire-cutter. Each soldier in a modern army carries with him sufficient food, clothing, shelter, fighting-arms, and ammunition to take care of himself for a short period in case he justing they can all be carried with the least possible effort. Soldiers are responsible for their equipment, and everything lost is paid for. Besides his extra clothing a soldier carries a blanket, rubber pouches, a canteen, a mess-kit, including meat-can, knife, fork, spoon, a cup, toilet articles, a first-aid package, and other minor belongings.

WHAT IT COSTS TO EQUIP A SOLDIER ·

According to a statement made public by the War Department it cost \$156.71 to equip an infantryman for service in France. Clothing cost \$101.62, eating utensils, etc., \$7.73, and fighting equipment \$47.36. On the next page you will find lists which tell what Uncle Sam gave his soldiers and how much each item cost.

Items included under "clothing" were:

One bedsack	\$0.89
Three wool blankets	18.75
One waist-belt	. 25
Two pairs wool breeches	8.90
Two wool service coats	15.20
One hat-cord	.08
Three pairs summer drawers	1.50
Three pairs winter drawers	3.88
One pair wool gloves	.61
One service hat	1.70
Two pairs extra shoe-laces	.05
Two pairs canvas leggings	1.05
Two flannel shirts	7.28
Two pairs shoes	10.20
Five pairs wool stockings	1.50
Four identification tags	.02
Summer undershirts	1.50
Four winter undershirts	4.88
One overcoat	14.92
Five shelter-tent pins	. 20
One shelter-tent pole	. 26
One poncho	3 - 55
One shelter tent	2.95
_	

Items included under "eating utensils" were: Food issued to each man to be carried in his haversack during field service, canteen and canteen-cover, cup, knife, fork, spoon, meat-can, haversack, pack-carrier, first-aid kit and pouch to carry it, costing \$7.73.

Items under "fighting equipment" follow:

One rifle	\$19.50
One bayonet	2.15
One bayonet-scabbard	1.13
One cartridge-belt	4.08
One hundred cartridges	5.00
One steel helmet	3.00
One gas-mask	12.00
One trench-tool	. 50
-	
Total	\$47.36

One of the most useful things a soldier carries is one half of a shelter-tent. It is often called a "dog-tent." Two men

can combine their halves and set up a shelter-tent in a few minutes. It is, of course, used only in temporary camps.

PAY OF SOLDIERS

A private gets \$30 a month, a firstclass private gets \$33; a corporal, \$36; a sergeant, \$38; first sergeant, \$51. There is a 20 per cent. increase for foreign service, computed on the base pay as it existed before the recent acts of Congress increasing the pay of the enlisted personnel. Clothing, food, transportation, and medical attention are supplied. Money not drawn can be deposited with the quartermaster in sums of not less than \$5. On the discharge of the soldier the amount deposited will be paid plus 4 per cent. interest. Such portions of a soldier's pay may be allotted to his family or relatives. Pay increases for those who have a trade or special qualifications, so while a firstclass private receives \$33 (for United States service) a month, a quartermaster-sergeant, senior grade, Q. M. Corps, a band leader, or a master signal electrician receives \$81. Monthly pay is increased with successive enlistments. Certain men, on account of special ability and service, draw from \$2 to \$9 extra monthly. Aviators (enlisted men) for flying get 50 per cent. increase over base pay; reserve military aviators, 25 per cent.; junior military aviators, 50 per cent.; and military aviators, 75 per cent. increase. The whole question is very complicated and need not be gone into here as regards enlisted men.

Officers, in addition to fixed allowances for quarters, heat, and light, receive the following sums yearly, with provision for increase every five years for all ranks below brigadier-general: second lieutenant, \$1,700; first lieutenant, \$2,000; captain, \$2,400; major, \$3,000; lieutenant-colonel, \$3,500; colonel, \$4,000; brigadier-general, \$6,000;



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The Cost of a Single Soldier's Outfit

Here is shown the complete outfit for a single doughboy in 1917, when we first entered the war. The prices, of course, are those in effect at the time. Obviouly, much additional equipment was necessary.

major-general, \$8,000; lieutenant-gen-

eral, \$9,000; general, \$10,000.

While in France pay could be drawn either in French currency, at an exchange rate announced monthly, or in a check on the Treasury of the United where to look for the enemy and what to do when I find him.

I will let no one but friendly troops pass me from the direction of the enemy, except in the presence of an officer.

I will fire on any one who fails to halt,



Amherst Stepping Into Line

States, which might easily be sent to the States or cashed in France at the current rate of exchange.

THE SOLDIER'S CREED

In Camp

I will remain quiet until told what to do. I will pitch my tent promptly and arrange

my equipment.

I will not leave camp until told.

I will try to bathe as often as possible.

I will change to dry clothing.

After bathing and eating I will rest all I can.

I will obey all instructions received from my company commander about camp sanitation.

On Outpost

I will keep alert every instant.

I will find out from my squad-leader

or otherwise disobeys me, after a second warning, or sooner if they try to attack or escape.

In Night Operations

I will not talk or make any noise.

I will not smoke or strike matches.

I will be constantly on the lookout for signals and orders from my officers and will obey them promptly.

If ordered to fire I will try to hold my rifle parallel to the ground and not shoot

high.

Under no circumstances will I fire my rifle during a night movement, unless ordered to do so, or unless it becomes necessary to give an alarm.

In Battle

At the command to advance I will do so at once.

In advancing I will try to be the first man to start.

I will not leave my place on the firing-line to carry a wounded man to the rear. That is the business of the litter-bearers.

I will not fail to set my sight at the range announced.

I will never lose an opportunity to replenish my ammunition from the belts of the dead and wounded.

When without a leader I will try to keep cool and keep on fighting, aiming and firing as deliberately as I can.

I will never stop firing or turn back until ordered by my officers to do so.

POST-GRADUATE WORK IN FRANCE

In the trenches the doughboy's order of life changed: day became night, and night day. When the sun was up and France was light, he slept, with guards, of course, for the business of modern

warfare takes place by dark or early morning. At dusk, or about seven o'clock at night, up came the first meal of his "day"—if it could come up followed by another meal early in the morning just before daybreak. But sometimes he might have to walk a mile to get to the chow-wagon; and even, sometimes, on account of the heavy shell-fire, the kitchen could not get to him at all or he to the kitchen. In that case, he had in reserve cans of hardtack and canned "willie" and canned heat. But his food usually consisted of meat and potatoes and coffee: "better kitchen in the trenches than behind the lines," was the verdict of one doughboy.

After he had eaten, began the night's work: digging trenches, fixing dugouts,



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American Cossacks Practising

Although the war of the trenches made the cavalry practically useless, our horsemen were kept in readiness to press forward when open warfare should be resumed. Here are some of our bovs doing "stunts" in the saddle. or that most dangerous and exciting of daily duties, scout duty. Its object was to get as near to the Germans as possible and find out as much as possible about them, with always the chance of One of the enemy's shells kerplunks into our first line; the men in the second line fill in the gaps. The line runs into a shell-hole; it splits, goes around, and closes up on the other side. It's just



A Practice Hike-University of Wisconsin

running into an enemy patrol, or tumbling into a German dugout, or getting lost in the barbed-wire entanglements.

When he went over the top it was usually in the early morning.

"Five more minutes," the captain would announce.

The doughboy would proceed to strip himself of everything that he could possibly do without, being careful to take with him hand-grenades and extra ammunition.

"It's the prettiest sight to see an advance," was one doughboy's enthusiastic description. "They go over in three waves, the first wave following close behind our barrage. A barrage, you know, is a wall of our own shell-fire for protecting the advancing men. It's all done as if it were done by machinery.

like machinery. There's no excitement, no getting scared; it's just keep going toward the objective."

If he met with resistance, he found a hole or dug in. His worst enemy was the machine-gun nest. This he circled, approaching from the sides, as the German machine gun could pivot only onethird of the full circle, unless time was taken to change its adjustment. Of course, our doughboy might be faced by a number of machine guns, so placed that there was a continuous circle of fire. In that case, the loss of men in capturing them was heavy. This fact accounts for the number of leg wounds among our soldiers in the hospitals, for the machine gun shoots low, counting on the enemy dropping to the ground for protection.

When our doughboy was relieved—and his length of stay in the front-line trenches seemed to vary according to circumstances—he went back to "support," in the second or third line, where the routine of the day followed closely

that of the first line. Then he fell back to "reserves," which meant three meals a day, new clothes, and, best of all, baths! There he drilled a little, and got "fixed up," to be clean, rested, and fresh for the next séance with Fritzie.

THE FIRST AMERICAN SOLDIERS TO FALL IN BATTLE

The Tribute Paid by a French Officer to Privates Enright, Gresham, and Hay

THIS eulogy was a part of the ceremony at the burial, in northern France, of the first three American soldiers who lost their lives. The words were spoken by a French officer. He said:

"In the name of the ——th Division, in the name of the French army, and in the name of France I bid farewell to Private Enright, Private Gresham, and Private Hay of the American army. Of their own free will they had left a prosperous and happy country to come over here. They knew was continuing in Europe; they knew that the forces fighting for honor, love of justice and civilization were still checked by the long-prepared forces serving the powers of brutal domination, oppression, and barbarity. They knew that efforts were still necessary. They wished to give us their generous hearts, and they have not forgotten old historical memories, while others forget more recent ones. They ignored nothing of the circumstances and nothing had been concealed from them—neither the length and hardships of war, nor the violence of battle, nor the dreadfulness of new weapons, nor the perfidy of the foc. Nothing stopped them. They accepted the hard and strenuous life; they crossed the ocean at great peril; they took their places on the front by our side, and they have fallen facing the foe in a hard and desperate hand-to-hand fight. Honor to them. Their families, friends, and fellow-citizens will be proud when they learn of their deaths.

"Men! These graves, the first to be dug in our national soil, and but a short distance from the enemy, are as a mark of the mighty land we and our Allies firmly cling to in the common task, confirming the will of the people and the army of the United States to fight with us to a finish, ready to sacrifice as long as is necessary until final victory for the most noble of causes, that of the liberty of nations, the weak as well as the mighty. Thus the deaths of these humble soldiers appear to us with extraordinary grandeur. We will, therefore, ask that the mortal remains of these young men be left here, left with us forever. We inscribe on the tombs, 'Here lie the first soldiers of the Republic of the United States to fall on the soil of France for liberty and justice.' The passer-by will stop and uncover his head. Travelers and men of heart will go out of their way to come here to pay their respective tributes. Private Enright, Private Gresham, Private Hay, in the name of France I thank you! God receive your souls. Farewell!"

THE CALL TO ARMS IN OUR STREET

By Winifred M. Letts

THERE'S a woman sobs her heart out,
With her head against the door,
For the man that's called to leave her,
—God have pity on the poor!
But it's beat, drums, beat,
While the lads march down the street,
And it's blow, trumpets, blow,
Keep your tears until they go.

There's a crowd of little children
Who march along and shout,
For it's fine to play at soldiers
Now their fathers are called out.
So it's beat, drums, beat;
And who'll find them food to eat?
And it's blow, trumpets, blow,
Ah! the children little know.

There's a mother who stands watching
For the last look of her son,
A worn poor widow woman
And he her only one.
But it's beat, drums, beat,
Though God knows when we shall meet;
And it's blow, trumpets, blow:
We must smile and cheer them so.

There's a young girl who stands laughing,
For she thinks a war is grand,
And it's fine to see the lads pass,
And it's fine to hear the band.
So it's beat, drums, beat,
To the fall of many feet;
And it's blow, trumpets, blow,
God go with you where you go!

-From The Spires of Oxford and Other Poems, by Winifred M. Letts. Copyright, 1917, by E. P. Dutton & Co, New York.

THE AMERICAN INDIAN IN FRANCE

Nine Thousand Indians Fight True to Their Traditions

THE American Indian may have lacked finish as a soldier, but he was certainly a success as a scout and as a fighter in a small group. The New York Evening Sun admits that from the standpoint of discipline Indians were not the best soldiers. They would not salute except when compelled to do so, and instead of a snappy "Sir" to an officer, which military regulations demand, they "grunted." But when it came to fighting and scouting and sniping, woodcraft was bred in their bones, and their tactics helped to keep down the casualty lists.

A CHOCTAW FROM OKLAHOMA

Silas Samuels, a full-blooded Choctaw from Oklahoma, was with the 312th Infantry, which, in his words, "walked all over France, fight a lot, but plenty food most of time."

"He was over the top four times, and knows positively that he killed at least one German, who opposed him during a trench-raid. He led a party over the top in a raid one night at midnight, and, guiding them along over the shell-torn terrain, was among the Germans before the latter knew of the foe's presence.

"The Huns fought for a few minutes, and then their artillery lay down a box barrage of shrapnel and gas. The gas got fourteen of the Indian's party and shrapnel accounted for three more. However, he assisted in bringing back fifteen prisoners, and saw one other Hun fall before his rifle. His dark eyes fairly glistened as he told of the death of the enemy. He made a quick, in-

stinctive move of the hand, and one could almost see the knife flash.

"'You know the cannon?' he asked, in his rich, guttural tones. 'Guns never still on our front. They roar all time like Thunder God in the mountains. Nothing so much like it except the Thunder God in the mountains. When German guns talk it is just like battle of good and bad gods.' His eyes glistened as he resorted to a native figure of speech to convey his impression of the artillery.

"Twice the young Choctaw and his band attacked the German trenches after violent artillery preparation. 'By damn! Germans run away and hide. Not stand and fight like us troops. We catch some in dugout. They come up, they yell something and feel silly. No fight till die, like Indians; quick give up,' he said.

"The fourth time Samuels charged over the top he was struck by shrapnel-fire. With typical Indian stoicism he walked back to the dressing-station and asked for first aid so that he might rejoin his troops. The surgeons examined his wound, and he has been in a hospital ever since. 'Leg sore, but I can fight when they don't let me. Old-time Indians hurt worse still fight,' he said, reverting to his own race for comparisons.

"Samuels did duty as a sniper at odd times. He says he accounted for a few of the Boches and his eyes danced as he described the death of one of them. This Jerry was peeping over a trench one night when Samuels was exploring around in a shell-hole. Years of hunting deer at night gave the Indian a skill

with the rifle that can be obtained in no other way, and the German 'went west' on one bullet.

"Samuels said that the whole Choctaw nation was glad of the chance to fight. They answered the call, but now that it is all over, he said, he was glad to get back to America, and he hoped to go 'gassing' received near Verdun. Though reticent at first, he later warmed to the conversation.

"'We were in a heavy-artillery regiment,' said Atkins. 'We devoted most of our attention to shelling a certain cross-road over which the Germans were bringing up detachments of troops and



From Leslie's Weekly

The First Red Men to Fight in Europe

Over one thousand Indians enlisted in the Canadian war contingent. The first unit was sent over in May, 1915.

home to Oklahoma and stay there. Having expressed his opinions on the war and told his experiences, the Indian stood up and said, 'That's all.' He shook hands gravely and returned to some of the other boys in the war.

A POTTAWATOMIE BRAVE

"Louis Atkins, a Pottawatomie Indian, is another brave who answered the call to service. Atkins was educated at the Shawnee Mission School and is a modern Indian of the finest type. He was with the 103d Field Artillery, attached to the Twenty-sixth Division, and is still suffering from the effects of a

issues of supplies and ammunition. We hurled six-inch shells on this road every night at two-minute intervals. Of course we never saw our target, so I cannot tell you just what we accomplished, but if Jerry was around when we were shelling he certainly got his.

"'Occasionally we were called in to participate in artillery duels with the German batteries. On such occasions we caught glimpses of the enemy positions. We managed to account for some of his guns, too. For several months—and every month seemed like a year—we were in constant action. Night after night we fired, sleeping in the daytime when we could. War is a terrible thing,

but I'm glad I was in it. I feel that I can look the whole world in the face, now that I went and have come back. The realization of duty well done is satisfying.

"I was gassed badly, and the doctors say that I will be a long time recover-



Courtesy of Red Cross Magazine

One Hundred Per Cent. American

Here is a type of American citizen of which our country can be justly proud—an Indian, turned in a few generations into a defender of his America.

ing, but even so I would not have stayed at home. I don't live on a reservation. We are full citizens, you know. I live with my mother. She wept when I left home, but she said to me: "Go over and help to end it all quickly. Remember the traditions of your forefathers, and be brave in action." I tried my best to follow her instructions.

"'Our guns were all brought up at night into prepared positions. Occasionally we had to dig our own pits and dugouts in which to take shelter. We had a lot of marching to do from time to time. Sometimes it was raining and we were drenched to the skin. At such times our rations often failed to reach us, and that failed to add to the comforts of the trip. But just the same we carried on. Our horses had to be cared for, too. The drivers had their own troubles.

"'I was a cannoneer, stationed at No. 2 position. I had to throw the empty shell-cases to one side and help in shifting the trail of the gun. It is heavy work throwing a six-inch siege-gun around.

"'Iwas gassed on October second. One night before that we had a great scare. We had a fire in one of our dugouts. Powder became ignited and it burned up all our stuff. Our gas-masks were consumed in the fire, and if Fritzie had sent over gas that night we would have been out of luck. But he didn't and we escaped. I really don't know how I came to be gassed. We were working and I didn't have my mask on. I was caught, and here I am. We had been deluged with chlorin, sneeze, and mustard gas before, but we all escaped.

"'But what is troubling me most now,' he said—and for the first time he showed real emotion—'I have not heard from my mother. I've written her twice, but no reply has reached me. I'm afraid something has happened to her. The war was bad, but her silence is far worse than all the German bombardments that ever were hurled against us.'"

AN OLD AMERICAN FAMILY

Joseph Cloud, scion of the famous Cloud family that once dominated the Sioux tribe, was walking around on crutches, nursing a foot that had been mutilated by German shrapnel. *The Sun* reporter outlines the war record of this representative of one of the oldest American families.



Courtesy of Red Cross Magazin

The Arrival in Paris

Every effort was made by the refugees to save their animals from the Germans. Here the goat was saved.

"He was a machine-gunner, attached to the 121st Machine Gun Battalion, and fought at Château-Thierry with the Mad Marines in saving Paris. He was over the top twice and came to close quarters with the Germans once. He isn't sure just how many Huns he got, but thinks he sent enough of them. Cloud admitted rather dolefully that there was no time to lift any German's hair. The troops had to keep on going, and he had to go with the troops.

"Cloud has no respect for the fighting ability of the Germans. He insists that when they are driven back they stay put. He sneered contemptuously. 'They don't attack the Americans. By damn! when we got over the top they run like hell, and they don't stop running at all.

"'I was wounded on August 4th at Château-Thierry. We were chasing the Germans back from the road to Paris. Our infantry waves were in front of us and the machine-gunners were coming along in support. Their guns were thundering at us to beat the band, but we got through the barrage all right and had them going. There were a lot of woods around where we were fighting, and the American troops adopted the old Indian tactics. They took cover whenever they could and advanced in a fairly even line.

"It was a terrible fight, with the shells roaring all around us, but we went on and over and through them. I was wounded just before we got to their trench. I was carrying ammunition. I tried to keep up, for I didn't want the boys to know I was hurt. But my foot

was broken and I had to lie down. I lay in a shell-hole until I was helped back to the lines.

"Before I was wounded I had been over the top before. This, too, was a frightful battle. We went over the top at one o'clock in the afternoon, and the battle raged for a long time. We drove the Huns on before us. They won't fight unless they are running. My forefathers gave the cavalry better battles than the Germans gave us.

"We underwent hardships cheerfully. There were times when the food did not reach us. Carriers were killed and gas spoiled the food. But we stuck it out gamely.

"'I did all I could for my country. I'm proud that I did and I would do it all over again, too. My nation gave liberally to the army. The men wanted to go; the women ordered us to go. No good Indian would run away from a fight. We knew that the life of America depended on its men, and we are Americans.'

"A note of pride came into Cloud's voice, and one could see through a veil of tears a painted-feathers warrior talking of the valor of his tribe. The years have altered the form and face, but the warlike heart of the Indian is untouched.

"'The Germans,' he went on, 'tried to stir up disloyalty among the Indians. They failed. No one could have made our nation disloyal. Whatever may have happened in the past is all over now. We are Americans, loyal Americans, and proud to fight under the Stars and Stripes.'"

A LETTER TO THE RED CROSS FROM A CHINESE BOY

DEAR SIR

I resolve to come to work on the red cross hospial ship. Because. I knows the red cross subdue people by virtue. Therefore, I would like working for the hospial ships very much. But. I never know where I can get one, for I will write this letter to you. I entreat you will to help and recommend me. Get me something to do. I am Chinese Citixen boy.

If you will care me kindly I am extermly grateful to you. Write to me as soon a possible.

Yours affectionate friend

FEEDING THE MEN ON THE FIRING-LINE

Clothes and Cookery Must Be Assured to the Men in the Field

WHEN an army goes into active service measures must be taken at home to provide it with both food and clothing. Formerly the invader possessed the right of "booty and pillage"—of taking by force whatever he might need from the inhabitants of the country through which he passed. Nowadays, campaigns are not so simply conducted. Those upon whom the responsibility must fall for the maintenance of the army in the field take into consideration three factors in particular: first, the time of year and the climate; second, whether the army is one of defense or invasion; third, the slow or rapid movement of the forces, and the slow or rapid increase or decrease of the distance from their base of supply. In order to make certain that the army will never lose touch with the home country the work performed by the administrative department is divided into the service at the rear—i. e., at the home base; the work of the line of communications; the supply-service for the troops in the field during actual engagements.

Most important of all is the line of communications. A general officer of recognized ability and discretion is always placed in command, and he is assisted by a large staff, in addition to whatever other forces he may require from other branches of the service. Each day he must forward the necessary supplies for each man and horse, and it is his duty to provide for the evacuation of

the sick and wounded and for the custody and care of prisoners.

As we have seen, the army in the field may subsist, and in times past has subsisted, almost entirely off the country through which it is passing. The custom of pillage has to-day become that of requisition. A requisition for food is usually made by the commander of an army through the mayor or other official of the locality. He in turn collects a war tax from his countrymen and receives from the military a receipt for the same. This sum may later be returned to the inhabitants under form of an indemnity, which it is becoming customary to demand after the conclusion of hostilities. Sometimes the old custom of billeting or quartering soldiers in separate families is revived. As many soldiers are quartered upon a householder as he has members in his family, upon the supposition that he will have provided enough food for a like number of people. Any householder who has entertained a wounded man in his house is "exempt from the quartering of soldiers." So also are charitable institutions, hospitals, and educational institutions for girls. Unfortunately, this rule is not always observed, nor are the very poor sometimes exempt from this imposition. It is pleasant for the men at the end of a day's march to find their food already cooked and prepared; on the other hand, the scattering of the troops prevents the enforcement of strict discipline, and the custom, on the whole, is rather necessary than admirable.

The field-bakery is an interesting part of the equipment provided the forces of the line of communications in order that they may supply the fighting-men with bread. It consists of twelve knock-down bake-ovens capable of producing daily eighteen thousand rations of field-bread (spe-

cially baked with a thick crust to withstand moisture).

The troops, having to march many miles a day, would suffer greatly if compelled always to await the arrival of the train carrying food. Therefore troops in the field must carry rations with them, and the ration consumed during the day must be replaced by the train at night. The Turks in the fourteenth century first established the allowance of a soldier's daily ration, and the same people first had regularly organized supply-trains to follow their troops. To-day the rations in the various armies differ according to racial tastes or climatic conditions. The meat ration of France, for instance, is quite different from that of Germany. If all the bread of the German bread ration for one week were baked in one loaf the loaf would weigh 60,130,000 pounds and would stand nearly as high as Cologne Cathedral.

"TOMMY ATKINS"

The Happy-hearted Warriors of Great Britain in the Field

T is clear that the British army lived

I up to its reputation.

"With the English troops we are having great difficulties. They have a queer way of causing losses to the enemy. They make good trenches in which they wait patiently; they carefully measure the range for the rifle-fire and they open a truly hellish fire on the unsuspecting cavalry. This is the reason why we had such heavy losses."

So the newspapers reported a paragraph in a German letter captured on

the Aisne battlefield.

"The Germans," said Field-Marshal Sir John French, in one of his reports from the same place, "tried hard to shatter the Allies' nerves by heavyartillery fire." They failed because, as the British commander put it, "the British soldier is a difficult person to impress or depress even by immense shells which detonate with terrific violence and form craters large enough to act as graves for five horses. The shells on impact send up columns of greasy black smoke. On account of this they are conveniently dubbed 'coal-boxes,' 'black Marias,' or 'Jack Johnsons,' by the soldiers."

Nobody who saw Tommy Atkins on other battlefields can doubt for a moment the justice of this tribute. He was no more than true to type. The magnitude of the affair did not bother him. He was merely doing on a large scale what he has done a dozen times in Africa and India. All the old stories of his cheerful coolness were resuscitated. He fished in Belgian canals, using his bayonet as a rod, with the enemy on the other side of the hill;

when almost under fire he snatched time to shave, and behaved with incongruous levity when quite under fire.

"If it's potting at the Germans that is to the fore, we keep at it as though nothing were happening, and if we're just having a wee bit chat among ourselves, we keep at it all the same.

"Last week when I got this wound in my leg it was because I got excited in an argument with wee Geordie Ferris of our company about Queen's Park Rangers and their chances this season.

"One of my chums was hit when he stood up to light a cigarette while the Germans were blazing away at us."

So wrote a wounded Highlander, and in a private letter one finds the following: "We had a whole day of it in the trenches, with the Germans firing away at us all the time. It was just after breakfast, and we were without food of any kind until we had what you call afternoon tea in the trenches under shell. The mugs were passed round with the biscuits and bully-beef as best they could by the cooks, but it was hard work getting through then and not getting more than we wanted. next-door neighbor, so to speak, got a shrapnel bullet in his tin, and another two doors off had his biscuit shot out of his hand. We are now ready for anything that comes our way, and nothing would suit us better than a good, big, stand-up fight with the Germans on any ground they please."

There have been the usual stories of men with a football tied to their kit, though it may be doubted whether either the weather or the enemy has given a chance for a repetition of those



These are specimens of "Fighting Young Atkins," wearing the helmets that they took from the Boches, Away from the Trenches, and Happy, Too

between-battle football matches which so much astonished the Boers.

WHO WAS TOMMY ATKINS?

But to achieve the right point of view about Tommy Atkins in action it is necessary to realize who he was and how he got there. First and foremost, he was a professional soldier as opposed to a conscript soldier. He was a volunteer in the sense that he deliberately decided to make war his profession. Patriotic as he was, there was much besides patriotism in his feelings when at the beginning of August he turned out and transformed England into an armed camp. He did not disappear into the outer darkness of a superlatively censored war, proclaiming to his girl that he would not love her half so much loved he not honor more. The landing in France was to him primarily a privilege, a chance of seeing the "real thing." A Highland regiment was kept waiting at Boulogne. Others passed it for the front. The men could not understand it. "More than half of us," said one, "were in South Africa and we've got the right to do our bit against the Kaiser before we get any older."

"More than half of us were in South Africa." That was one of the greatest secrets of the way in which the English fought. Unlike the German army, far more than the French army, they had seen active service. The army did not have to find itself. It did that almost continuously in Egypt, in South Africa, and upon the Indian frontier. Its leaders were virtually all war-trained, from Sir John French down to the average captain and major. Its equipment and behavior were the result of practical experience. The Germans suffered enormously from mass formation. The Boer War cured the English of that. Had it not been for India, it is possible that the British troops might, like the French

and Belgians, have still fought in the picturesque uniform of the Crimean or Franco-Prussian war. As it is, upon the kit of the British soldier was written much of the character of the British army. It was the neatest in the field. Even the jealously guarded kilts of the Highlander were now dyed an olivegreenish brown. The British khaki is somewhat greener than that used over here, so as to tone with the prevailing green of Europe as compared with the brown of India or Mexico. Whether it was a better protective color than the German iron-gray is somewhat doubtful; but it must have struck the redtrousered soldier of France and the picturesquely uniformed soldier of Belgium as being enviably practical.

HOW TOMMY WAS EQUIPPED

Among the British there were no flowing trousers, no cumbersome greatcoats. Officers and men in the infantry wore neat breeches and puttees. In the cavalry the officers had leather service-boots—i.e., riding-boots with a little lacing in front, or else leather leggings. Virtually everybody except the Highlanders, from Field-Marshal Sir John French downward, had for head-gear a comfortable flat-topped kind of cap. Everything was sacrificed to comfort and military convenience.

One saw the results of compactness and trained preparedness when the Expeditionary Force landed at Boulogne, Rouen, and other points of disembarkation. Competent and confident irresponsibility best fits the atmosphere that surrounded it. Everybody was confident. Everybody was competent, from the shipping companies and their men, who got the whole army across without a single casualty, and the commanders and staff-officers who made the arrangements, down to the troopers, who, as soon as their horses were un-

slung, were busy tending them against the flies of France. As for irresponsibility and cheerfulness, they stuck out all over. There was no reasoning why —just a cheerful acceptance of factsof the field-guns; the slinging out of the horses before gaping crowds of French fishermen and old women in their picturesque head-gear held back by a thin line of French Territorials in their blue



From Leslie's Weekly

A British Cavalry Camp

Only a small part of a soldier's life is passed in fighting, even when on active campaign duty. A greater part is taken up in drill, inspections, and making himself comfortable in camp or quarters. The cavalryman has double work to do, for he must not only keep his arms and kit in order, but feed, groom, and care for his horse as well.

except French tobacco and illegible French newspapers. "The Kaiser's getting a bit thick and it's time 'e was stopped." They let politics go at that and set themselves to study their allies and get their equipment under way.

LANDING IN FRANCE

The bustle and picturesqueness of it all under the clear blue skies of a French August can be imagined; the landing and red; Tommy Atkins in his shirtsleeves hauling at the long ropes and dragging ammunition-carts upon the flat railway-cars: English seamen leaning over the bulwarks of the steamers and leisurely watching the whole business.

And after the work was over, what endless fraternization between the Allies! What a sizing up of fighting qualities and all the rest of it! "His opinion of his French comrade in arms is very

favorable," said an English observer of Tommy Atkins, "but unacademic in expression. 'His trousers are baggy,' said one soldier to me, 'but 'e's a good un, although 'e only gets a halfpenny a day, and that paid every five days in a crossed check.' A French comment I heard as Tommy marched along was equally brief and eloquent—the English of it would be, 'He sure is a big man.'" That must have been the common French view. In his tight-fitting kit the average Tommy towered a monu-

Everything was done to make him at home. Interpreters swarmed about like bees. The men were supplied with a half-sheet, typewritten French-English dictionary, providing for most requirements in the way of food, drink, and geographical direction. This was supplemented by the extreme eagerness of every French human being within reach to understand any single English word. Gestures were employed on both sides in filling in the gaps. Tommy might be seen trying to explain "saucepan" with



From Lestie's Weekly

Facing Death in Blithesome Mood

Who knows how many of these men ever came back again? But look how happy they are, even though they know they are facing death. Perhaps it is because they feel that they are fighting for a cause—perhaps it is because they are so young.

ment of muscle among the small and wiry "piou-pious" with their baggy trousers and flapping coats. Except that he often, like his officers, has a neat mustache, his replica can be found by the score in any American regiment.

his hands when he wanted an egg plain boiled. At least, so it has been stated.

RUSHING FOR BELGIUM

But there was no tarrying at the ports of disembarkation. No sooner had the

British units got ashore than the rush toward Belgium started. Especially for those who went on foot it was picturesque and light-hearted in the extreme. Flowers were showered upon the soldiers; even the field-guns were garlanded. It was carnival, not war. "Have you any English papers got?" cried the Tommies in their mangled French when they halted in the wayside towns. Secrecy and newspapers don't tally, but they got a Gallic welcome instead. They were surrounded and kissed until their cheeks were sore. Their buttons and badges were torn from them as souvenirs.

Gradually the scene changed. As the Belgian frontier was approached and crossed an ominous note of preparation crept in. The rush of motors and lorries became less insistent as thev trailed off to supply-bases, hospitalbases, etc. Apprehension sobered the enthusiasm of the villagers. Bands of frightened refugees from beyond came into sight. The roads became more choked. The coming and going of the staff-officers grew until gradually it was only the troops (tanned now until the mustaches of some showed almost white against a brick-red skin) who, infantry, cavalry, and artillery alike, drew forward behind a line of the scouting airplanes.

HIS COOLNESS IN DANGER

The transition was sudden, but, to Tommy Atkins, not disconcerting. After all, he was not on the Continent junketing, but for a shy at the "sausages." It was probably around Mons that the British troops first came into contact with the enemy. A Belgian described them in the London Times: "'What impressed me above all were the coolness and dash of the British soldier. His utter indifference to danger and his general air of "Don't

care," simply carried me away. At moments of critical danger I have seen him worrying as to when he was to get his cup of tea from his little traveling-kitchen.

"'I shall never forget the admirable reply given by an English soldier, wounded in the hand, whom I found sitting by the roadside outside Mons, wearing an air of consternation. I began to talk to him and asked him if his wound was hurting him. "It's not that," he said, with a doleful shake of his head, "but I'm blessed if I haven't been and lost my pipe in that last charge." I gave him mine and he was instantly comforted.

A HUMANE FIGHTER

"There is another thing that struck me enormously, and that is the humanity of the British soldier when the fighting is done. In battle he is superb. He puts into the fight all his energy, all his indomitable pluck, and he deals terrible blows at the enemy. But when the battle is over, his first thought is of humanity. The British do not exult over the enemy's losses. They try to snatch from death as many of their enemies as possible. After the battle, the men with whom they have just crossed blades are no longer enemies. They are, in their eyes, just poor wounded fellows. This solicitude, greathearted as it is, after hard fighting, will always redound to the honor of the British army.'

"It was hard fighting both at Mons and all along the line of what is called the battle of Charleroi. It was indeed more than hard fighting. It was the beginning of a retreating fight against superior numbers. Writing after a week of it, an English cavalry officer said: 'We've had a hell of a time. All by ourselves—the English against a force of Germans five times as big. Our



British Soldiers at Neuve Chapelle

They don't look very depressed, do they? It was men like these who held the Germans time and again against great odds.

troops have been wonderful. Beat to the world, tired and hungry, they have fought grandly, but they are well worn now. The infantry were grand and the cavalry saved them again and again, covering their retreat in a mag-



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Anti-aircraft Gunners

nificent manner. I am coming back all right, never fear. Have been in such tight corners, and under such fire, that if I was meant to go I should have gone by now, I am sure.

"'I have just found my kit. I haven't changed anything for a week or taken off my boots for five days. I look too filthy for words, and have been looking after my own horse, and have ridden one all the time, as I could not get the others.'

THE IMPERTURBABLE SCOTCH

"Tommy Atkins was equal to it. There was no growling except at having to fall back before an enemy over whom, as Lord Kitchener put it, he felt he had established his personal ascendancy. Take the following impressions of a Highlander: 'We of the Argyll and Sutherland Highlanders took up a position facing a wood where the Germans were in strong force. As they emerged our boys met them with a raking riflefire, which moved them down. On they came again and again with the same devastating result. Their bullets came whistling around us, but we were indifferent, the marksmanship being very poor. The German infantry carry their rifles under their arms, the butts resting on their hips, and they fire as they march. As the enemy poured out en masse into the open it was like the exodus from the Celtic and Rangers Scottish Cup final! Man! if they were only three to one we could go through them easily, but when it comes to ten to one strategy as well as bravery has to be considered.'

"Imperturbable responsibility carried them through. 'The soldiers,' said one of their number, 'take everything quite coolly. You would have thought they were at a football cup tie. They were lying in the trenches with German shells flying all around, and they would make bets as to how many Germans they would kill and had killed during the day. They were laughing and joking all the time. A party of the King's Own went into one battle shouting out, "Early doors this way. Early doors, ninepence!" There were chaps, too, coming in and having their wounds dressed and going off again to have another go at the Germans. Our men fought simply grand. At Landrecies, while our men were lying in the trenches there were a couple of fellows playing marbles with



Parties by Edward A. Wren



bullets from shrapnel-shells which had burst around them.

"The officers are grand. They do everything they can for our comfort. They are always looking after our chaps, and I cannot speak highly enough of them. The men, too, seem pleased to think that they are doing their duty to the officers.' Not that it was only a case of dogged defense of guns served till the last man dropped; there were charges of all sorts—of infantry upon infantry, of cavalry upon infantry and cavalry, and even upon artillery, notably that of the Ninth Lance near the Belgian border when at great loss a German battery was sabered into silence. Since the battle of the Marne there have been. of course, many more instances of such offensive gallantry.

"But it was in the early defensive

retreat that Tommy Atkins's fundamental qualities had their best chance of appearing. He has added fresh scrolls of honor to countless regimental flags. He has sealed a fresh compact of mutual trust with his officers and commander-in-chief. To quote one of Tommy Atkins's letters home: 'General French is very popular with his men. There's no side about him, and when he passes along he's just as ready to smile on the ordinary Tommy as on the highest officer. He takes a keen interest in our life in the trenches, and we all feel that he's just the man to turn to in trouble, and there's not one of us who wouldn't go through fire and water for him. He never asks the impossible from us, but acts as though he could rely on us to get out of a tight corner."—The World's Work.

FOREIGN SOLDIERS OF FRANCE

The Zouaves, Spahis, and Chasseurs of the Foreign Legion

EVER since 1871 France has found it necessary to support her power in Africa by native soldiery, with Frenchmen scattered through their ranks and a nucleus of French regiments to give morale. Charles W. Furlong, F.R.G.S., describes them in *The World's Work:*

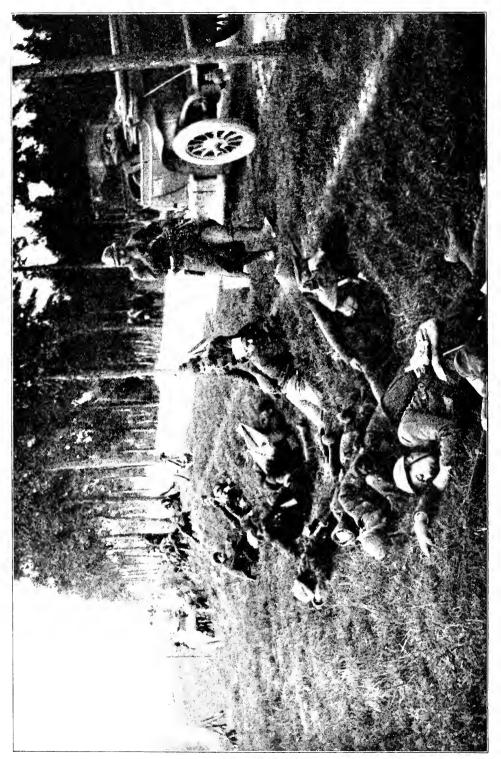
THE ZOUAVES

"The most historical and fabled of the native troops are the Zouaves, partly formed of French volontaires Parisiens and Bataillons de la Charte (prisoner battalions). These regiments, renowned as much for their extraordinary behavior and rascality as for their extravagant daring, were organized about 1830, soon after the Algerian conquest, and first contained only Kabyles and other natives. They are fire-eaters all,

a rather short-statured, broad-shouldered, deep-chested, bull-necked, picked There is hardly a hill of the Algerian atlas that has not borne witness to their agility, endurance, and wonderful fighting ability; few valleys in which they have not bivouacked; and scarcely a wood copse of corkwood or Algerian oasis through which, in their picturesque green turbans, blue jackets, and red Oriental trousers, bound at the waist with broad cummerbund, at the lower end in leather buskins, they have not flitted as skirmishers like evasive willo'-the-wisps in streaks of golden sunshine and violet shadow.

SPAHIS AND CHASSEURS

"The union of two elements is necessary in the African cavalry to insure



A Midday Rest

Even soldiers have to relax. See how some of these men, right in the middle of the day, have fallen fast asleep.

success—French and Arab—the Chasseur and Spahi, for, despite his valor, the tall soldier in blue needs Arab to hunt Arab; just as our own Colonists needed the Indian to ferret out the red man from the forests, and as to-day our regulars need the Moros under the gallant officers of the Philippine Constabulary to run down the ladrones in the mountains and jungles of Mindanao.

"Long experience has proved that the chief of each corps and the captain of every squadron should be a Frenchman, and only in exceptional cases a native. The expedient maximum of French privates seems to be one fourth, in this corps often called with a smile 'the refuge of sinners,' for many free and easy characters chafing at the restraint of regular French discipline are in its ranks. The Spahi officers must serve a minimum of two years; for the private a knowledge of French and Arabic is an asset in promotion. Contingents of Arab allies are sometimes temporarily incorporated in the corps.

"The Spahi and the horse he rides are abstemious in their habits. A little barley bread for the man, chopped straw, a bit of green fodder, and a few wild leaves of artichoke for the steed, and they will, with light equipment and saber, pistol, and carbine, like the Chasseur, brave the heated desert wind without water, and go forty-five to sixty miles without resting or unsaddling. This, it must be remembered, is on the well-bred native horse, who, like his master, is adapted to the climate and fatigue.

"The Spahis and Chasseurs d'Afrique have always been the couriers, the spies, the vanguard of the military moves, the vedettes of warlike Algeria posted at the extremity of the lines. These marvelous horsemen have wielded a saber and carbine control over a vast territory of mountains and of sand and silence—supple, high-strung, indefatigable rough-

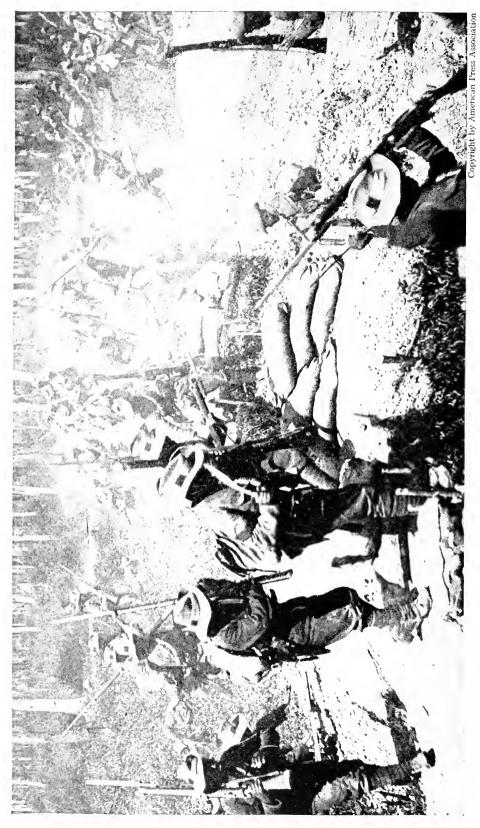
riders of the desert, they have made it possible for France to push her conquests even south of Timbuctoo, west to the Atlantic, and east to Wadai and Darfur.

"The Chasseurs are good marksmen, and, whether in close order or as skirmishers, are wonderful fighters and equally wonderful plunderers. A little corn for the Chasseur's horse, a little rice for his master, and no obstacle stops them. They neglect no skilful precaution, which has gone far to inhibit them with the habit of conquest. They are the *élite* of the French cavalry in Algeria. Bravery in action and generosity after victory have won for them from the Arabs the title, 'lions of the desert,' and from the French government at Constantine and Oran exemption from certain routine parades and the enjoyment of certain salutary irregularities.

"Both branches of this light cavalry are such in the real meaning of the term and in the highest acceptance it admits. 'Chasseurs and Spahis! Their numbers are written in all epochs and in the most glorious pages of this modern Iliad.'

TIRALLEURS INDIGÈNES

"Besides the Zouaves, there are the famed *Tirailleurs*, the lightest and most mobile troops of all, comprised of sharpshooters and used primarily as infantry skirmishers, for scouting and advanceguard work. France has organized Tirailleurs Indigènes, or native sharpshooters, in a number of her colonies, and perhaps those best known outside of Africa are the Tirailleurs Tonkinois, dubbed by the Foreign Legion 'Young Ladies,' because of their adherence to their peculiar head-dress and because they consider it beneath their dignity to carry anything but arms and ammunition, the rest of their kit being carried by the natives, who follow like a lot of pack peddlers. The *Tirailleurs*



First-line Goorkhas Capturing a German Trench Amid the Smoke of Battle

In this photograph, slightly obscured in parts by the smoke from shells, we see the Indian soldiers pouring over the parapet of a half-demolished trench from which the German defenders have just departed. A part of the company, in the upper right-hand corner of the picture, is following the enemy, while others are investigating the trench to see if any Germans have lingered to make trouble.

Tonkinois, like the Goorkhas, take their wives on the march, who carry the family cooking-pots from shoulder-poles.

"In the old days the French African light infantry of the line were called 'Zephyrs'; some hold that it is now applied to all French infantry in Africa, but it is applied more often to the penal battalions sent far south into the reeking heat of the fever-laden Sahara—the worse the crime, the farther south.

"LÉGION ÉTRANGÈRE," OR FOREIGN LEGION

"Perhaps of all France's alien troops, perhaps of all troops in the world, over the Foreign Legion hovers the greatest halo of glamour and romance. There have been Foreign Legions in most of the world's great wars, and, in modern times, have been known as such. French Foreign Legion is said to have originated in the Scottish Archers of Charles the Seventh of France, and from all the other nationalities employed by his successors. After the Napoleonic wars the foreign regiments were disbanded, except the Royal Foreign Legion created in their place by Louis XVIII, gradually becoming merged: into the 86th Regiment of the Line. The year after the Revolution (1831) the present Foreign Legion was formed, the French Chambers decreeing that it was not to be employed on the soil of France. We find regiments of the Foreign Legion ordered wherever French colonies need their presence, yet the world identifies it most closely with its two North African regiments.

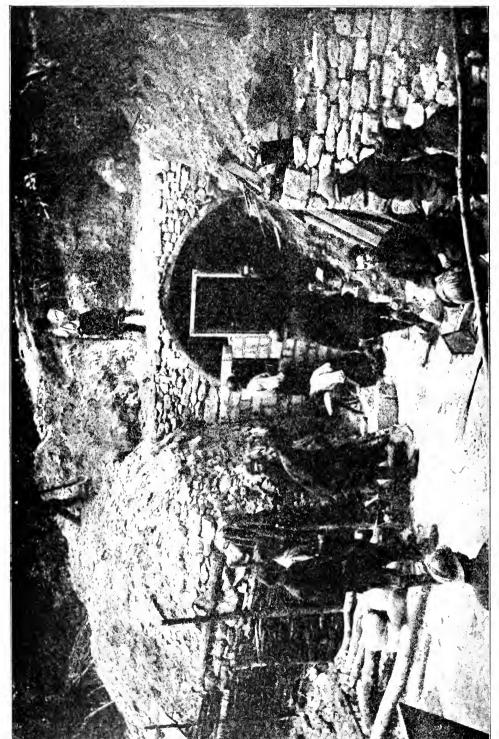
"So we find, clothed in the loose red trousers, blue blouse, double-breasted black tunic with red facings, and wearing red-fringed green epaulets, and the blue woolen cummerbund around the waist, and a red $k\acute{e}pi$ on which flares the seven-flamed grenade, the badge of the Legion, approximately eight thousand

légionnaires living on seventeen centimes (three and a half cents) a day.

"In many ways they represent the same types of men as our Federal volunteers, and, like the volunteers of any country, include many adventurous spirits, deserters from armies, men who have slipped a cog in life, men whose histories read like veritable legends. In the Foreign Legion, marching 'side by each,' are French, Poles, Italians, Belgians, Eurasians, Levantines, Austrians, Russians, Greeks, Swiss, and a very few British. It has included as many as twenty-eight Americans at one time, but, strange to say, more than half the légionnaires are 'made in Germany,' if we include those from Alsace and Lorraine. Men are promoted to commissions from the ranks and some of the most noted of their officers have borne German names, and one company was led to the attack of Casablanca, Morocco, in 1907, by a Japanese captain.

"Those who join from love of adventure are not likely to be disappointed: the story of the majority is framed about a woman, and those who join, as many do, for a panacea of crossed love, are disappointed, for the *légionnaire* is more likely to lie down in the vermin-filled bunk or blanket than in a bed of roses. Then there are the 'broken men' who have joined 'to save' their 'injured feelings,' 'for it was time and time to go,' or to expiate their sins, or down-in-the-gutter men who hope the rigid régime will force them to buck up and start anew—these, too, if they survive the rigorous campaigns, are not disappointed.

"The average French légionnaire is of the working class, likely enough a deserter from the French army, who has enlisted as a Swiss or a Belgian. Beside these, as one strolls through their barracks at Sidi-bel-Abbes, a bit in the hinterland of Oran, or sees them 'off-duty' in a desert encampment, one may



The Foreign Legion

Poles, Levantines, Swiss, Eurasians, and Greeks, drawn to the Allied armies by love of adventure and a passion for the cause of freedom.

find in the sockless shoes of *légionnaires* ex-army officers, barristers, professors, diplomatists, and even ex-bishops, perchance 'heel-balling' their black belts, and, among those doing their washing, a prince or a banker; and if the missing scion of a noble house is wanted, the well-worn advice is, 'Write to the colonel of the Legion.'

"But it is a life which either 'makes or breaks' a man, generally in the march, which is the severest test; each man carries his entire equipment, the small tent d'abri going to make up the seventy to eighty pounds of weight on his back. Under this in the withering heat on burning Saharan sands he has been known to march thirty miles in a day, with hourly ten-minute rests. It has been well said that 'the Legion is a mercenary force in theory only. The legionary practically fights and works for nothing, so far as money is concerned, for a sou a day is all the cash he gets.' Thus 'France takes much from the Legion and gives little in return.'"

GETTING READY FOR "DER TAG"

A Picture of the German Military Machine—A Day with a Prussian Drago Regiment

WE have heard of the regiments of gray-clad Uhlans that swept through Belgium in August, 1914. The following story from *The World's Work*, written early in the war, tells of the exercises and maneuvers which trained these cavalrymen and made them part of the German military machine:

"Our horses were waiting outside our door, and, once mounted, the brisk September air blew all the sleep out of us. As we rode down the narrow village street the gable ends of houses at the end were quaintly picked out in sharp silhouette against a broad chromewhite streak of day in the east. Before we reached the fields we were riding in a big company of silent cavalrymen, dragoons and Uhlans combined. They came out of lanes and cross-streets and courtyards as noiselessly as shod horses can move on macadam. Here and there a saber rattling against a boot, curbchains clinking, a low monotone of hoofbeats; no calling out, no bugles. silence was very impressive.

"Staff orders came to each regiment

the night before the maneuver, usually before nine o'clock, and then each squadron leader in the regiment got his own order accordingly. Thus every man knew the night before precisely what he would be expected to do the following morning. Every single detail was carried out precisely as it would be in war-time.

"Up in the blue sky a couple of airplanes were sailing around like noisy buzzards. Ahead of me in their grav uniforms cavalry scouts stood out fairly against a prevailing straw color of stubble-fields, for the only green on the ground at that time of year was the fields of potatoes and beets checkerboarded with the brown of fresh-plowed land. In Picardy and Normandy now the harvest will be gathered in or standing crops trampled into the same buff color as stubble. And so against this background the much-described German fog-gray, which merges wonderfully into spring or summer landscape and is as vague as anything else on snow, will stand out more distinctly than British khaki.

"Somewhere through this tranquil, sunlit agriculture the Red infantry was already moving toward us, taking cover on the reverse slopes of hills and in ravines as their cavalry patrols, followed Prince's regiment, recognizable then as now only by their gray horses. While I sat watching them the Red and Blue outposts came into touch far out in front in a crackling of carbine-fire, with



From Leslie's Weekly

Uhlans in Belgium

Splendid as was the discipline of the German cavalry, it lacked something of the iron qualities of the infantry system.

by horse artillery, felt for our advanced positions. With my glass I could soon make out troops of the 'enemy's' screening cavalry, and a big column of dust filtering straight up in the air over toward Alt Warshow indicated the presence of a large body of troops advancing along the road or across plowed fields. Our own dispositions behind me were easy to observe from their vantage-point. Regiments of infantry were moving out by roads and across fields to take positions in advance on the line or in reserve. Their solid gray masses seemed to ripple with the motion of their marching. Most of the Cavalry Division—dragoons, Uhlans, cuirassiers, and hussars—had been concentrated in advance on this flank. In the next brigade beyond our position were the famous Todtenkopf (Death's Head) Hussars from Danzig, the Crown

intervals, like the first pattering drops of a shower. The battle was on.

THE MEANING OF "UHLANS"

"The matter of distinguishing the various bodies of German cavalry is not generally understood outside of Germany. Foreign newspapers have been calling them all 'Uhlans,' probably finding that an odd and mouth-filling word apparently synonymous with cavalry. In reality there is little or no distinction between dragoons, hussars, cuirassiers, and Uhlans. All of them are armed precisely alike, with lance, carbine, and saber, and all perform alike the mounted and dismounted functions of the cavalry arm. During peacetimes they are distinguished by their garrison uniform. But in France and Belgium now, as in these field maneuvers

last autumn, every cavalry regiment wears the same war gray. The cuirassiers have discarded the conspicuous shining breastplate which gives them their name; the hussars have scrapped their handsome but useless cloaks and facings. The various branches of the service are now distinguished only by the trimmings of their uniforms—shoulder-straps, buttons, etc.—undiscernible at fifty vards—and by their head-gear. Uhlans wear a sort of flat mortar-board top to their helmets, dragoons and cuirassiers have a spike on theirs, but in the latter regiments the steel comes down low on the backs of their necks, as is the case also with French cuirassiers. Hussars, lightest of all in men and mounts, wear a straight-up-and-down beaver cap with a pompon in it. All the helmets are now covered with grav

briefly described our brigade was deployed or in action much of the time with the Crown Prince's brigade, thus bringing dragoons, Uhlans, and hussars all together in several evolutions, vet it was almost impossible in the rush and smoke and dust to tell them apart. Whenever cavalry or artillery moves in large bodies it is always either muddy or dusty. This day it was exceedingly dusty. On one occasion the whole Uhlan regiment made a charge down a hillside, across a road, and into a plowed field against supposedly broken hostile cavalry on the far side. They came thundering down in double rank across the stubble, hit the road with a prodigious clatter, broke into the plowed field, and disappeared utterly from sight in a panoply of dust that surged up over them twenty feet high. We heard them



From Lesties Weekly

German Troops Going to the Rear at Neuve Chapelle

cloth, so that the steel protects but does not glitter in the sun. Uhlans and cuirassiers are the heaviest German cavalry.

"On the day of the maneuvers here

yelling afterward, but never saw them again until the end of that movement.

"This charge of the Uhlans was preliminary to another by our regiment, which had been held back in reserve. We turned off the road to the left, minding the colonel's upheld sword arm, each squadron leader handing on the order, and then, wheeling into double rank as the Uhlans had done, galloped down a ravine, jumped a couple of ditches, which left several riderless horses careering over the field, then up the other side, taking machine-gun fire all the way, and delivered a charge on the right of the Red cavalry's line slam into the mêlée theoretically created by the arrival of the Uhlans that were ahead of us.

"The whole movement would have failed, however—since the ravine took most of the shock out of our impact and we found ourselves outnumbered—but for the very opportune arrival of the 5th Brigade, which made a magnificent onslaught, brigade front, outflanking and crumpling up an attempted countercharge by the enemy's reserve regiments. The umpire rode in between us and held a brief critique, giving a needed rest to the horses, which were well blown on both sides.

DISCIPLINE BETTER THAN HORSEMAN-SHIP

"In such maneuver charges each line pulls up or ceases firing when within fifty yards of the other, and it is an indication of the rare discipline and training in the German cavalry that every trooper and horse, no matter how excited, always obeys the signal. You rarely or never see an unmanageable horse or an overheated rider driving on into the ranks of the enemy. Their discipline is, however, better than their natural horsemanship. A German is not a natural horseman, although he can attain a high degree of mounted efficiency. The many riderless horses that I saw during these maneuvers were accounted for partly by the prevalence of small drainage-ditches, horses in

the rear rank not marking them in time to jump or stride clear, so that the horse and rider came down together. Only against cavalry, it must be explained, are charges made in two ranks and boot to boot; mounted attack against machine guns, bicycle companies, artillery, or infantry is always in single rank and wide open. A German cavalryman's seat is formal and inelastic, his hands heavy. He rides in a saddle something like the United States Army McClellan, with longer bars and without the cutout slit in the center of the tree and with open stirrup. He is taught to ride with a firm grip of the lower leg and makes very little effective use of balance. In all the German cavalry regiments I never saw any one ride with a loose seat except the Crown Prince, who sat his horse very carelessly, with his legs and feet sticking out in front.

"The Crown Prince himself was in the field a puzzling element in the general scheme of military efficiency. His regiment took part in the brilliant charge of the 5th Brigade of which I have just spoken, and he has many times proved himself a cavalry leader of great spirit and ability. During the critique, while we were dismounted, he came up and shook hands with me very unaffectedly and cordially, supposing, no doubt, that I was a lonely foreign officer who might be made thus to feel more comfortable. Even for thirtytwo, he seemed then and afterward very boyish, constantly smiling and talking to those near him, smoking a cigarette when not in action. In the top of his soft black leather boot stuck an English brier pipe."

THE CROWN PRINCE

His nose is red;
His eyes are blue;
His chin recedes;
His armies, too.
—Life.



German Infantry Resting

The German hordes poured into Belgium and Northern France like a swarm of locusts, leaving death and destruction in their wake.

"Later in the day, as senior regimental officer, he commanded the same brigade on account of an injury to the commander, but fared less well than in the morning. The hostile cavalry had made good its escape after the morning's repulse, and was reported to be advancing again, heavily reinforced and covered by artillery and machine guns. Our division commander with two brigades blocked one line of approach and sent the 5th Brigade with our regiment to dispute the other line, intending not to be drawn into a serious engagement, but to develop the enemy and, after delaying him, make his determined opposition at a point to the rear where he could get prearranged artillery and infantry support.

"The Crown Prince messed up this plan completely. As we were approaching Wusterwitz we were fired on by machine guns, and, deploying both sides of the road, the whole brigade charged. In the outskirts of the town we ran into superior cavalry and were promptly ruled overthrown. Falling back in good order, we were enabled to reform under cover of two bicycle companies, which most opportunely bowled up the road, threw their wheels into the ditch, and went into action with great spirit. The enemy, however, continuing to appear in increasing numbers toward both flanks, the division commander was forced to come to our assistance with his two brigades, but he had no more than arrived when we were attacked brilliantly by the Red cavalry and rather badly used up again. Our brigade was just mounting, having been holding the enemy off with dismounted fire, so that the Red arrival threw us into confusion and prevented our meeting the attack with any headway.

"In the long critique which closed the day's work, the division commander was severely criticized for not making his orders so *sharf* (insistent) that it

would have been impossible to draw any part of his command into a fight where he had not planned to engage. This was, of course, a sharp indirect criticism of the Crown Prince, who took his medicine like a soldier, admitting frankly, when questioned, that the fault had been his.

A CLASS IN TACTICS ON THE FIELD

"The corps commander who held this critique, General von H—, was famous for his long-winded lectures, which were, nevertheless, appreciated for their sagacity and practical usefulness. On this occasion he talked for nearly an hour and a half, this critique, as generally, being held on the top of a hill to give a view of the terrain fought over. . The general, a short man, sat on his horse so as to be in a commanding position in the center of the brigade and division commanders grouped around him on foot. I was amused at the Crown Prince taking pictures of the maneuver director during the lecture. He grew very bored toward the end, shifting from one foot to the other. He had a miniature camera with which he snapped the general two or three times, holding it behind his back until the opportunity presented itself, when he would quickly take the snapshot and then hand the camera to an officer who stood directly behind him. This officer would turn on a new film and return the camera to the Prince unobserved.

NO UNNECESSARY NOISES .

"To me the most extraordinary thing about the movements of a German regiment in action, and this is true of infantry as well as of cavalry, is the entire absence of unnecessary noise. During this whole day of sham fighting, for example, the only bugle note heard was the recall, sounded late in the after-



Church Parade of German Troops

The Germans who fought in the Great War considered themselves religious. The Kaiser continually urged his troops to pray for victory. But even the German militarism.

noon to signify that the maneuver was over. Commands are rarely shouted; there is none of the continuous velling generally associated with the control of large bodies of men. The German system presumes an absolute attention, so that orders may be given by mute signal. A regimental commander, in sight of his troops, will give the order to mount or dismount, to change pace or direction, by simply waving his arm. When a leader is out of sight or at a great distance his commands are carried by orderly officers, attached to the General Staff or regimental and brigade commanders, who ride back and forth transmitting orders by signal to squadrons and companies. In the course of a hard day's work each one of these orderly officers will use up three or four good mounts.

"There is, however, one occasion when German drill regulations call for all the noise possible—namely, when a cavalry charge is pressed home. A charge is rarely, if ever, launched over a longer distance than half a mile. In the last hundred yards of this distance or at a signal as horses are spurred to top speed, every man breaks out into a wild, inarticulate yell. When a brigade or division comes on all together with its united outcry the effect upon a broken enemy is, as it is intended to

be, appalling.

YELLING UNDER ORDERS

"Herein lies another curious instance of the German way of doing things. The German military system does not take into account the natural impulse of a charging, excited trooper to yell anyway under such vociferous conditions. He is commanded to yell as part of the shock action to which each man must contribute to make overpowering. During the winter schooling he actually is drilled in individual charging to yell at a certain point in the charge and is

severely criticized if he does not make noise enough. It is the same way with singing. The Germans are naturally a musical people and sing spontaneously, but with regiments in the field songs are started and stopped by command.

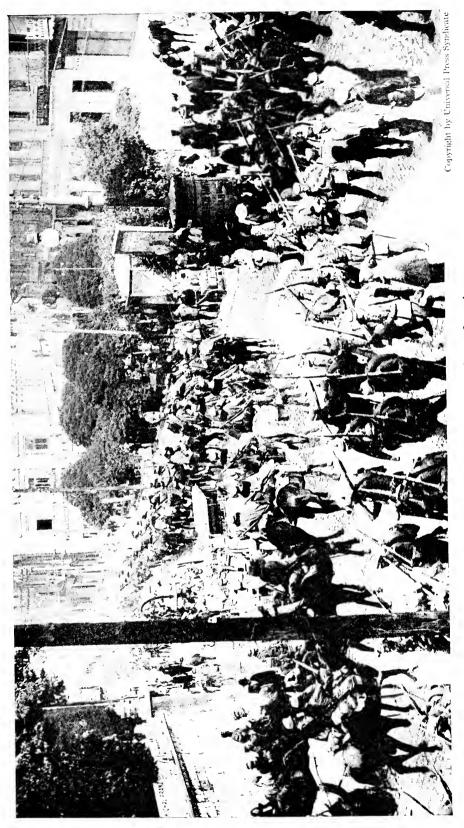
"Just as quietly and unaccountably as they emerge at dawn German soldiers fade away into their villages at evening. There is as much discipline in this as in

their conduct in the field.

A PEOPLE PROUD OF MILITARISM

"Another thing must be borne in mind in all this automatic adjustment: The people themselves are keyed and used to military associations. Nearly every householder—minister, banker, shopkeeper, peasant—is either himself a reservist or has immediate army affiliations. If you go into a peasant's cottage you find the principal ornament in the best room is a photograph of the owner in the uniform of his regiment. If you visit a country estate you find the family portraits are all in uniform, and in the den or study of your host you find his helmet and saber forming the center of a group of regimental scenes and trophies of the hunt. On the walls of the dining-room in taverns hang pictures of several generations of kings and kaisers and historical scenes taken from the life of the local regiment in peace and war.

"As to the burden of military service, it has rather an opposite effect in Prussia from that imagined in unmilitary nations. Herr von Alten, when we were quartered in his house, spent most of the evening and part of the following morning explaining to me why he had not served with the colors. In some districts of Germany non-service is a kind of shadow always to be felt, a burden of recurrent proof. 'The girls won't dance with the no-service men,' the colonel told me as a matter of fact.



The Germans' Entrance into Lemberg

It was the scene of much hard fighting during the war. Here the Germans are seen entering the city after it had been relinquished by the Russians. This city belonged to Poland.

"Deep-chested, clean-shaven boys between eighteen and twenty-six make up the first-line cavalry. I have spoken of their discipline. It is a native discipline carried over from civil life. During my two years with a German regiment I never saw a man drunk, although every squadron has its canteens. Outside of regulations there was almost a complete absence of disciplinary measures for the rank and file. In the Kasino (officers' club) vou never saw any one except at meal-time; there was never any treating, and, except on regimental nights once a week, or some special occasion like the Kaiser's birthday in January, when all married officers join the others at dinner, there was never any sitting about after dinner. You never heard any officers in the field kicking against an umpire's decisions.

"So much for discipline. There are two other ingredients in the German military spirit. On the last day of the maneuvers occurred one of the most stirring evolutions I ever saw, of no value as a military operation, but tremendous as a spectacle, and probably put on purposely for its effect on participants and spectators alike, for there were thousands of the latter present, gathered from all over the district. With the infantry and artillery already engaged in front, the entire cavalry division was brought from the rear and charged in a body. Coming up first en echelon by regiments, they worked thus into brigade front at the gallop; then the three brigades swung into line and the whole flying mass of forty-five hundred men abreast, yelling like bucaneers, cut loose at a dead run over clear ground. They bore down like a long wave, the strung-out infantry in their path throwing themselves together at signal in prone clumps of ten or twelve men each, through which the charge streamed unchecked, straight on through the guns, which continued to fire up to the last second, and on into a line of flags beyond that indicated the enemy.

"Our maneuvers in Prussia wound up with a huge review of the whole army corps in the fields near Schlawe. There were bands of music then, flags flying, and the lance pennants of cavalry squadrons were unfurled and snapping in the breeze. Infantry regiments came by, thumping the ground with the goose-step, which does not seem ridiculous in a German parade. Even the bicycle companies kept uniform time with their pedaling as they wheeled over the grass. The thing that impressed you most was the enormous pride that every man seemed to take in what he was doing: he was alive with military ardor, informed by it, possessed by it.

"Serious pride, capability of daring abandon, and innate discipline: there you have the military spirit of the Prussian cavalry regiments. And when you are with them it is difficult to conceive how German militarism oppresses the people, for the people and the army seem one and the same. The German

army is the German nation."

THE ORIGIN OF POISON GAS WARFARE

MR. ERLAND NORDENSKIOLD describes tribes of South American Indians, the Tupinambá and Guaranis, for instance, who used poisonous gases in attacking fortified villages.

"Men went in front of the attacking party, each holding a pan with embers in one hand, and ground red pepper in the other: when the wind was against the Spaniards they sprinkled the pepper on the embers. This was also done in attacks on the Spaniards in Venezuela. In the same way pepper was largely used in exorcising demons and evil spirits. The use of this pepper, known as api, would soon be discovered by these Indians, who cultivated the plant extensively. It was only necessary for some one to upset a hasin of aji into the fire, and a hut would soon be cleared of its occupants. The use of the smoke in warfare would be a natural development."—Nature

RUSSIAN AMAZONS

A Scene from the Revolution in Russia

"HE is going to review the soldiers!"
"No, he is going to bless them!"
"They have already been blessed,

this morning by the priests!"

"Then what else is to be done for them? Isn't that enough for girls? Faugh! Let them go home and mind themselves—isn't it enough that our men should be shamed by the Germans and this horrible Czar, without having girls sent out to make a mock of them, in boots and caps and carrying guns, as if they could shoot?"

"Well—one doesn't know what to think nowadays; these are strange times. It doesn't take a great deal of strength to fire one of these new English rifles. Only a good eye and a will to kill your enemies. Only be certain

you know who they are, first."

The uncertain, uneasy crowd shifted back and forth, as they had all day, through the portion of the narrow sidestreets of Petrograd that converged toward the cathedral square of St. Isaac's, where the great, dingy, golden dome glistened like a picture from The Arabian Nights against the dim, northern summer sky. The commander of the Petrograd garrison, accompanied by a handful of officials in uniforms more or less rumpled, and with their loops of vellow braiding a little fraved (the times had been too full of alarm lately for them to think much about the military tailor or the pressing-shop), advanced hastily toward the square of the cathedral, where he was indeed to review the girl-soldiers, as the people called them—the Battalion of Death, as they named themselves, in the highsounding Russian-student phrase.

It was the first women's regiment to be raised in Russia, and in it Ensign Vera Botchkareva had had her wish. Fighting was no new thing to Madame Botchkareva. Since the day that her husband was killed in action, in May, 1915, she had fought on the Eastern front. Once during the Lake Maroch battles, when all the officers of the regiment had fallen, she had herself rushed forward, shouting, "On, comrades!" and the men of the Twentyeighth Polosk, all of whom knew her, and called her by a nickname, Vashka, had followed her unhesitatingly. For this and other daring performances she had received two medals of the Russian St. George and two crosses of St. George. Yet only recently, after more than two years of fighting, had she been legally admitted into the army, for the laws of Russia, like those of all other civilized countries, forbid a woman's going to war.

TO PROVE THEIR METTLE

Indeed, it has always been denied that women, as a class, are strong enough, or bold enough, to fight like men. And that was just what the short-haired, dark-faced women in the square of St. Isaac's were anxious to prove. They thought that by showing their own valor in the trenches they would encourage the Russian men; yes, shame them into fighting once more, as the ugly mutterings among the crowd proclaimed. At least, so the girls hoped, they might weaken the effect of the German pamphlets offering a deceitful peace, and of the

German agents of all kinds, who crept even among the women waiting for dreary hours in the bread-line outside the bakeries of Petrograd, whispering: "The Germans are your friends! Make peace and they will give you plenty of bread!" And the military women as she was, she did not bear the slightest resemblance to Joan of Arc. She saw no visions of St. Michael, harkened to no unearthly voices. She had done a man's work all her life until her marriage, going out to clean and wash by the day to support her small brothers



Courtesy of Red Cross Magazine

Modern Amazons of Russia

Women of all stations of life joined the legion. Widows, peasants, rich women, college graduates, all made up the Battalion of Death.

thought, also, that by proving their own strength and formidableness as a class they might even help to intimidate the Bolsheviki, who were already beginning to raise their heads against Kerensky and the members of the moderate government that had been in power since the overthrow of the Czar in the winter.

Not that it is to be supposed that Madame Botchkareva had any such complicated idea in regard to the mission of her Battalion of Death. Peasant and sisters, and thus take the place of her father, who had been crippled in the Turkish wars. It was nothing wonderful to her that women should fight, or that they should form a regiment. If they wanted to, let them. She had seen with her own eyes the desperate need for fighters in the wavering Russian ranks. The party of the British ambassador, pausing in the early morning on the threshold of St. Isaac's, and gazing into the airless, vast interior where solitary ikons gleamed,

and where, far up through the halfopened, jeweled gates, long-bearded priests in green-and-red robes were celebrating a service for the women, were awed in spite of themselves. They fancied they saw tears on the rough, heavy face of Botchkareva, as she knelt in the light of the altar-candles to kiss the cross which one of the priests held out to her. They were mistaken. Botchkareva was only a blunt, competent old soldier, and it was these qualities that had won her the permission of the authorities to raise a regiment, and had rendered the women of the new intelligentsia, as it was called, who wanted to fight for Russia, willing to throw in their lot with her.

The first to join her standard had been the two hundred girl students of the Petrograd Technical Institute, who represented part of an important class in Russia—the restless, brilliant female students of colleges and technical schools, whose greed for equal education with men had scarcely been satisfied before it was forgotten in their greater eagerness for a free Russia. They had been equally persistent with the men in stirring up the inert mass of Russian farmers and laborers to the earlier revolution, for which they had undergone persecution and banishment. And now those of them who had not become pacifists or socialists were heartily in sympathy with Kerensky's government, which was endeavoring to carry out Russia's compact with her allies and to continue the war. With the students of the Technical Institute were waiting in the square about a hundred others mill-hands and shop-girls, girls from the millinery and a few from aristocratic homes, who had run away to go to war. After being blessed and reviewed, they expected to entrain that night for the front. Most of them were between the ages of eighteen and thirty, although a few of the brawnier-looking were older. All wore khaki blouses, short breeches, and green forage-caps decorated with the medallion of the Czar, which an oversight, or perhaps the poverty of the revolutionary government, had neglected to change. They looked a little bedraggled as they stood there in their uniform of private soldiers, but the uniform of a Russian private is always too loose for him, and their other officers, besides Madame Botchkareva, were men. The old general called to them in somewhat embarrassed fashion, "Welcome, comrades!"

"Hail, General!" they replied, or words to that effect. Then, after a little bungling and confusion at the first, they went through their drill very well, "with great spirit and accuracy."

That night in the yards of the dirty Finland station the same curious, startled, inattentive crowd watched them entrain. As they filed between these tracks the strange, bright, July twilight struck across their banners, of which they had a good number—half a dozen or so-of several colors, with pictures painted on them, and Russian lettering, done in gold. The crowd cheered occasionally while they waited for their train, which, with a great deal of rattling and bustle, was being shifted from a siding, but it was only roused to enthusiasm for a moment when an orator—the Russian streets were full of orators-leaped upon an empty freight-car where several of the women sat waiting, guns across their knees, and began to denounce them loudly, "for shaming all true Russians."

"Down, you son of a dog, down! We'd stone you if we weren't afraid of hitting somebody worth while!" shouted the crowd. The American news correspondent who looked on was just reflecting that it would be quite on the cards to begin a riot, when the order to entrain was given, the coaches started, and the "Women's Regiment" was off.

IN THE HALITCH DRIVE

In the Halitch drive, which occurred about two weeks later, the soldierwomen were scattered in small groups among the regiments on that front, except Botchkareva and thirty of her strongest, who remained together and are said to have fought like demons. When the men who were with them or six who had been killed in action, Petrograd was in a furor for several days. They were given a special ward in the hospital across the Neva, and people sent presents of flowers, fruit, and musical instruments, and came endlessly to inquire how they did, and to marvel at a blood-stained German helmet which a girl with a shrapnel-wound in the shoulder had brought back.



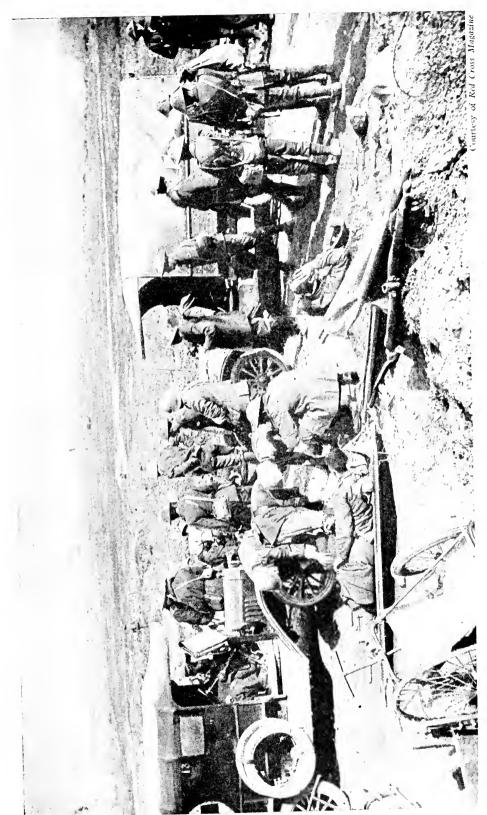
Group of Russian Women

Belonging to the Battalion of Death, showing their boyish faces and their closely cropped hair.

withdrew before the onslaught of a party of Germans, the story is told that the latter, seeing the fierce, disheveled faces and brandished weapons of those who were left before them, cried, despairingly, "Ach Gott! it is the Russian women!" and laid down their arms. The others were given the arduous task of bringing up ammunition under fire. They sat on the ground and filled canvas bags with cartridge-belts which they afterward carried to the men in the trenches.

Many wild stories were afloat concerning the little handful of women on the firing-line, and it is certain that for one reason or another some of them never reached the front. But when the hospital-train returned with their wounded and with the story of the five "I had to kill him," she explained, when asked. "He was wounded, but he raised himself on one elbow and fired at me as I passed with the ammunition. I knew that if he didn't get me he'd get some of the others. As to how I felt, what a question! Why should I mind killing a German more than my comrades?"

When this was repeated, idlers in the café shook their heads and recalled the fighting-women of Dahomey in West Africa, where up to 1818 human sacrifice still persisted, and where it was said to have been part of the ceremonial for the first regiment of state (the women's) to carry the savage sacrifices in baskets on their heads. A few others asserted that during the troubled times in Bohemia in the eighth century there

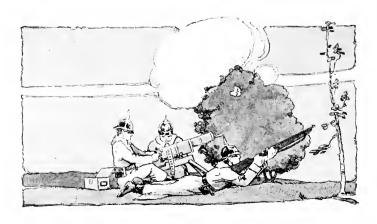


Right Up on the Firing-line

The ambulances sometimes penetrated as far as No risk was too great for a Hospital Corps man, if he could bring relief to the wounded. had really been an army of women who declared war against the Duke of Bohemia and for a period kept him and his court in terror of their lives. There were stories of German women fighting disguised as men, who had been captured by the Russians; of Victoria Maria Lanz, an eighteen-vear-old Tvrolean girl, who, after fighting for two years with the Italian army, had been seriously wounded and decorated for Several Russian women were mentioned who, like Botchkareva, had gone to war with the men, among them Mademoiselle Skrydhoff, who, having gone to fight in her own father's regiment, had won a medal of St. George for discovering a German telephone hidden in a loft.

The recruiting of the women in Russia became popular. There were recruiting stations at Petrograd, at Moscow, at Kiev. Some women who had been to the front as Sisters of Mercy were anxious now to go back with guns in their hands. The daughters of some of the wealthier people began to go into training. A university student, Mademoiselle Fromenka, chairman of the Women's Military League, raised a battalion which was to have a regular staff, its own transport and medical service, its own signal corps, and a machine-gun company with four guns, as well as an expert scouting detachment of twenty-six Cossack girls. A fashionable girls' school near Petrograd was turned into a barracks. Pamphlets were issued, some addressed to the army at the front, "The time will soon be at hand when it will be better for you to face ten German bayonets than one tigress mother of Russia." One was a pathetic appeal to England and France, "Our children worthy of the name of heroes have shed their blood . . . but now German propaganda has paralyzed our valiant army . . . we declare that Russia shall be free!"

But the force of eight or nine hundred women could do little. All that fall Russia drifted toward anarchy. In September, Vera Botchkareva, whose harsh tongue and blunt ways did not endear her to some of her followers, was almost mobbed by a battalion at Moscow. In November, when the Bolsheviki were taking Petrograd, and Kerensky was a fugitive in the Winter Palace, a few of the women and a remnant of the Cadets essayed to protect the palace with its five hundred sick and wounded. They surrendered only when gunboats were sent up the Neva and threatened to fire upon the city. Then, when Petrograd was at last in the hands of the Bolsheviki, Mr. Buchanan, the British ambassador, had to intervene to protect the few remaining members of the women's regiment that fell into their power.



GRENADES

Lyddite Does What the Husky Arm of the Old Grenadier Used to Do

IN the days of the old-fashioned, muzzle-loading musket the hand grenade was at least equally useful. It was merely a hollow iron shell thrown by the grenadier after he had lit the fuse from the always-burning match that he carried with him. Sometimes the fuse went out before reaching the target. Sometimes the grenade flew back and hit the grenadier. Occasionally it went straight and made a big hole. In these days of rapid-firing rifles and long-range field-guns, however, no one entertained any notion that the hand grenade would still be found effective. As the war progressed and enemy trenches were dug at a distance of fifty yards or so, it was found that a rifle of two-and-one-half-mile range would not hit a man with his head down in a pit fifty yards away. To meet this emergency the Germans evolved a short-barreled gun with the power to heave a few hundredweight of explosives into the air far enough for them to fall into trenches dug no more

than a hundred yards away.

The British hand grenade is more nearly the shape of the old-fashioned one. It consists first of a piece of cane with a metal head on it, containing the bursting charge of lyddite and the detonator or exploding arrangement to act when the grenade strikes. The handle and head together are sixteen inches long. Attached to the end of the cane handle is a three-foot bit of cloth, the tail, to make the grenade fly true and be sure that it strikes head first on its detonator. Normally the machine is carried by a hook, handle downward, at the soldier's belt. When the time comes to use it the soldier unhooks it from his belt, turns a cap at the head of the grenade until the word "remove," painted on the cap, is exposed, and then removes the safety cap. The tail is then unwound from the handle, the safety-pin locking the detonator plunger is withdrawn, and the grenade is ready to throw. The soldier is told to be sure that the three-foot tail does not become entangled with him or any object near him when it leaves his hand. Lyddite, the explosive used, is made of carbolic and nitric acids. The French melinite and the Japanese shimose are similar explosives under another name. This charge is five or six times as powerful as the old-fashioned black powder formerly universally used in missiles of this kind.

The latest development of the hand grenade has been invented by a Norwegian engineer, N. W. Aasen, whose mine grenades work practically without the help of soldiers. Each grenade, weighing about nine pounds, contains four hundred projectiles, together with some ounces of a very powerful explosive. This mechanism can be set working only by the action of an electric current supplied to the grenade through a rope-like cable. The grenade and cable are buried in the ground, so as to be entirely invisible to an enemy. When the firing takes place the projectiles sweep horizontally over the surface of the ground in an area of more than nine hundred square yards. It is said that grenades once planted may remain in the ground for years without suffering any damage or betraying their presence by explosion unless ignited by the electric spark. Farmers may even

till the field without discovering them, if they lie deep enough.

THE RED CROSS SPIRIT SPEAKS

By JOHN FINLEY

WHEREVER war, with its red woes,
Or flood, or fire, or famine goes,
There, too, go I;
If earth in any quarter quakes
Or pestilence its ravage makes,
Thither I fly.

I kneel behind the soldier's trench,
I walk 'mid shambles' smear and stench,
The dead I mourn;
I bear the stretcher and I bend
O'er Fritz and Pierre and Jack to mend
What shells have torn.

I go wherever men may dare,
I go wherever woman's care
And love can live,
Wherever strength and skill can bring
Surcease to human suffering,
Or solace give.

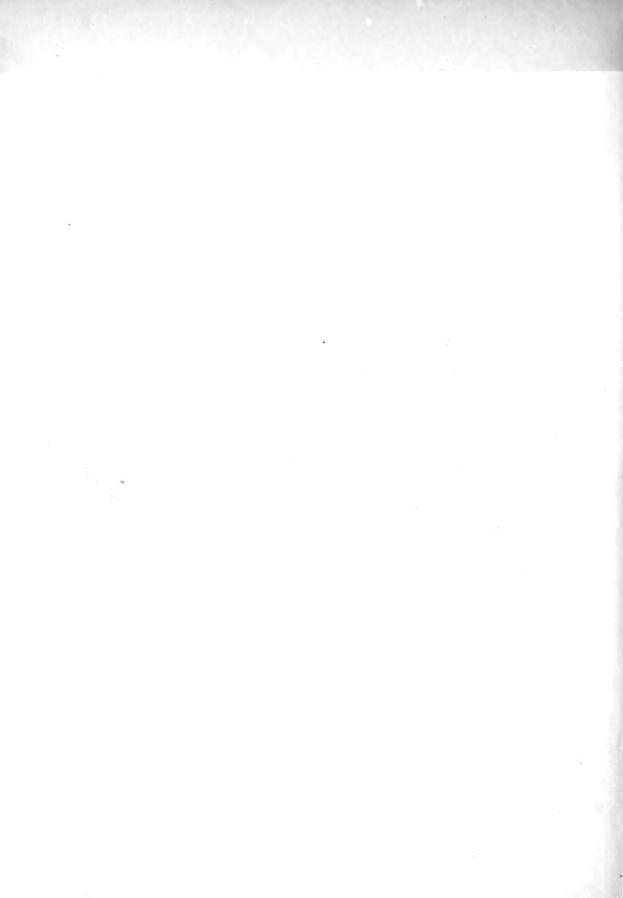
I helped upon Haldora's shore; With Hospitaller Knights I bore The First red cross; I was the Lady of the Lamp; I saw in Solferino's camp The crimson loss.

I am your pennies and your pounds;
I am your bodies on their rounds
Of pain afar;
I am you, doing what you would
If you were only where you could—
Your avatar.

The cross which on my arm I wear,
The flag which o'er my breast I bear,
Is but the sign
Of what you'd sacrifice for him
Who suffers on the hellish rim
Of war's red line.



A Christmas Card for the Kaiser



V. WAR IN AIR, ON LAND, AND SEA

AIRCRAFT

The Eyes of the War

A BATTLE IN THE AIR

LYING at no great distance above the ground, two large British airplanes, each carrying two men, were approaching the German lines when they were observed by a couple of flyers whose planes were at a far greater height and which displayed the black cross that marked them as German The Germans immediately turned the noses of their Fokker machines downward and came whizzing through the air like shooting-stars straight upon the two intruders. As they dived, they spit out a stream of fire and lead from their machine guns and they dropped in such a fashion that the bullets were scattered circlewise about the mark they hoped to hit.

Almost at the same instant two light machines, single-seaters, carrying the Allied insignia, dropped from a still higher altitude and swooped like hawks behind the tails of the German fighting-planes. Before the Germans had reached their prey they were being raked by the deadly fire of the Allied pursuers. The fuel-tank of one of the Germans was struck by a bullet and burst into flames. The Fokker crashed to the ground thousands of feet below, behind his own trenches.

The other German might have met the same fate but for a quick movement that looked like sure death at first. He swung his diving plane straight toward the earth, then swung it still farther so that it was flying upside down for a moment, and came back on the up turn of a loop that brought him right behind his pursuer. It was now the German's turn to direct a hail of bullets at his enemy's back, raking him from rudder to propeller, and the Allied flyer would have been done for if he had not made a quick side-slip that brought him out of range.

Before the German could renew his attack, another fighter had entered the combat, an Allied scout that had been flying so far above the rest that it was a mere pin-point in the sky. It had been doing what aviators call "ceiling work"—that is, soaring at the highest altitude in order to guard its friends below.

At the sight of the duel it had dropped like a dart, and now it was flashing straight at the German, who was taken quite by surprise. The other two Allied planes had, by this time, secured a position above the German and were preparing to force him toward their own lines, and the Teuton flyer saw that he had no chance against this combination. Besides, his ammunition was nearly gone and he began to think that the best place for him was the fatherland; so diving, looping, and zigzagging, he made for home at terrific speed. Though closely pursued, he escaped with nothing worse than half a dozen bullet-boles in his wings.

The Allied fighters swung slowly back toward their own lines, still keeping guard over the two low-flying airplanes, which were now on their way back to headquarters. They had done no fighting and had been hardly disturbed by the shells from the anti-aircraft guns This is typical of the day's work done by the swift, light fighting-planes that can twist and dive and climb like a flash. Their duty it is to guard the slower and heavier observation- and



Vernon Castle Flying

All kinds of people rushed into service when danger threatened. Baseball-players, playwrights, poets, editors, sportsmen represent only a few classes of the thousands that responded. Vernon Castle was a professional dancer. He met with an accident while still in the United States and fell to his death in his machine.

of the Germans. But it was their work which had been the cause of all this fighting, thousands of feet above the armies.

They had been busily taking photographs of the German trenches, the troop-trains heading to the front, the munition-dumps where shells were stored, and the batteries concealed by trees and earthworks.

Almost before the last of the smoke had blown away from the wrecked enemy machine, the plates had been developed, and Allied staff-officers were studying the position of the Germans. bombing-planes, which could not work perfectly without such protection. And upon this work may depend the success of a battle and the outcome of a war.

THE IMPORTANCE OF AIRCRAFT IN WAR

For aircraft are the eyes of the army. With his airplanes flying over the enemy's lines, a general can learn where the troops are and attack at the weakest point. He can tell where the enemy's batteries are hidden and direct his fire upon them. He learns where their supply stations are placed, containing

munitions or food for the army, and can drop a few shells there to destroy them. He can find out where the reserves are located, and, if troops are being massed at any given point, the airplane scouts can send word back by wireless so that the attack can be met.

Just as in a boxing-match the advantage is with the man whose eye is quick and who can see where the other fellow is about to strike next, so in warfare the greatest aid to victory is the knowledge of how strong the enemy is, what he is about to do, and where to strike the hardest.

That is why the fights for the mastery of the air are so fierce and determined. An army which could gain complete control of the air by driving away or destroying all the enemy's planes or balloons would be a sure victor. It would have the advantage of a man with two good eyes fighting a blind man.

It is not strange, therefore, that each

sort. They had to pass the most difficult tests to prove that they could think quickly and act promptly in the face of danger. They had to be absolutely fearless, for every flight brings the aviator face to face with death. They had to be steady of nerve, so that a shell bursting near enough to rock their machine would not disturb them. Their hearts were tested, for the sudden drop from a great height to a low level would be fatal to a weak heart. Their eves must be perfect in order to follow the movements of the enemy and to distinguish the markings on a distant plane that told a friend from a foe. Finally, they had to be at just the right age, for, as one expert expressed it, "Men under eighteen are too reckless, and men over twenty-five are too cautious to make the best air fighters."

That is one reason why the war in the air was more like the single-handed combats between armored knights than anything else in warfare of to-day. The



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A Curtiss Biplane

A Curtiss biplane with twin motors, used by the United States air service during the war.

nation in the World War worked its very hardest to build the greatest number of aircraft and to train the most daring flyers. The men chosen for this kind of fighting were the very finest

most adventurous and high-spirited boys were eager to become aviators, and at the beginning of the war a number of young Americans won fame for themselves by serving in the French air service, forming the famous Lafayette Escadrille.

A GALLANT "ACE"

The chances for distinction were great in the aerial fighting. When a man had downed five enemy planes he was known as an "ace," and as his record of victories increased, his fame would spread to the enemy's camp, and often some champion from the other side would send a formal challenge for a hand-to-hand duel above the lines. Captain Immelmann, who had a record of fifty-one Allied planes sent to the ground, was challenged in this way by Captain Ball, of the British Royal Flying Corps, and the firing below them was withheld while these two knights met on their winged steeds above the armies and fought to the death. At first the German seemed to have the better of it and Captain Ball's friends, watching from the ground, thought he was lost. But by a quick maneuver and a well-placed shot Immelmann was sent crashing to the earth in flames after a short and thrilling struggle. At once the Englishman flew back to his own camp, descended for a moment, and returned with a wreath of flowers, which he dropped over the spot where the enemy was lying. No more chivalrous act may be found in the legends of King Arthur. And a few days later Captain Ball met his death.

OBSERVING ENEMY POSITIONS

The airplanes were constantly sent out to direct the artillery fire. If shells were being dropped within our lines from some unknown source, these air scouts would be sent up to locate the batteries. Though the guns might be cleverly hidden by brush and painted with streaks so that they could not be seen from above, the keen-eyed aviator

was sure to detect the flash of their discharge. Circling overhead, he would drop bits of tinsel in the air, and these, catching the sunlight, would show our artillery officers where the batteries were hidden, or a report would be sent back by wireless, describing the exact position on the map. This made it easy to shell the enemy's guns. Often, too, the aviators would hover over a stronghold that was being shelled and report by wireless whether the hits were being made, or whether the shells were going to one side or beyond the mark or falling short of it.

Of course, neither side was allowed to carry on such observations without a struggle, and the airmen would engage in desperate duels while the battle was

raging below.

Captive balloons were used for the same purpose—big, sausage-shaped gas-bags swinging at the end of a long cable. Observers in these balloons telephoned back to their own headquarters while exposed to the attacks of artillery and the swift raids of airplanes. Often they were forced to descend in a hurry, leaping with their parachutes as the gas-bag collapsed in flames.

AIR RAIDING

While the main use of the aircraft is for scouting and reporting on the enemy's position, it is also used for raiding in much the same way as cavalry—that is, for a surprise attack and a quick retreat. Early in the war the big dirigible balloons of the Germans dropped bombs over Belgium and later made repeated attacks upon London and other cities of England. These battleships of the air were not a military success. Though they carried tons of bombs and several guns, and could travel great distances, they were not so dangerous as the comparatively small airplanes. More than thirty raids

were made over England and the air above London was the scene of many a battle between the raiders and the antiaircraft guns and the British planes. The object of the Germans was to

The Zeppelin raiders did not escape unharmed from these raids. Though they flew by night, they were picked out by searchlights playing over the city and British planes swarmed into the



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America's Main Reliance in the Air

The De Haviland Four observation and bombing airplane, of which we were making two hundred and sixty a week when the armistice was signed. It has a speed of one hundred and thirty-five miles per hour, and carries two men.

strike terror into the hearts of the English by these attacks on its crowded capital and perhaps to destroy some important arsenal or military works or war office. But the result was just the reverse of what the Germans hoped. The killing of women and children and unarmed men roused the fighting spirit of the nation. The hundreds of noncombatants who were killed by these raids did not help the Germans win a single battle, but, on the contrary, strengthened the determination of the English to win the war.

air to fight off the invader. The huge balloons, five hundred feet long, made an easy mark for the bullets of the airmen and many of these terrifying monsters were brought down in England or fell into the sea.

The raids of the Taube airplanes over Paris were no more successful. The dropping of bombs into their capital failed to terrify the French. The killing of women and children only enraged them and strengthened their resistance to an enemy so barbarous.

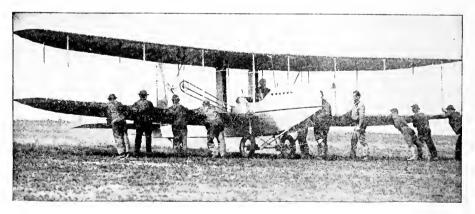
It was not until long after the Ger-

mans had been dropping bombs over the cities of England and France that the Allies decided to give them a taste of their own medicine, and, in fact, little was done by the Allies by way of air raids upon cities that were not strictly military positions. Raids were made, however, upon Essen, where the Krupp works turned out great guns for the Germans, and upon ports where submarines had their bases, and these bombing expeditions had some effect in hastening the end of the war. The attack upon Zeebrugge shows how the bombing-planes go into battle. A fleet of seaplanes rose from the North Sea under the protection of British battleships. They were large, heavy ma chines carrying two motors and with a liberal supply of explosive bombs. Each aviator knew exactly what mark he was to fly for, and this base, where the submarines found shelter, was fairly riddled by bombs from the flock of overhead destroyers. Airplanes from Nieuport joined the seaplanes from the

fight off this attack were repulsed and the charge in the air was a complete success. The submarine base was very badly damaged and this was proved by observations of scouts who afterward flew over the scene of the battle.

AMERICAN PLANES

At the time of the signing of the armistice, America was turning out great quantities of bombing-planes equipped with the famous Liberty motor. This was the work of a number of our most famous designers of engines, who combined their plans to make a perfect airplane-motor. It was the intention of America to send over thousands and thousands of such heavy bombingplanes built like the NC-4, which was the first to fly across the Atlantic. With this navy of the air added to the planes of our allies, the Germans would have been outnumbered and bomb attacks would have reduced the German strongholds and naval bases to



A Wright War-Plane

Another type of machine used by the United States Army air service.

fleet, and meanwhile the monitors, which had been built to steam in shallow water, had come within range and were bombing Zeebrugge with their heavy guns.

The German aircraft which tried to

ruins. There is no doubt that America's airplanes helped tremendously to bring about the German defeat.

The airplane did its bit in the war against the submarine, for it was found that the flyer looking down upon the

water from a great height could see far below the surface. The submarine which was absolutely hidden from the watchers aboard a ship could be picked out easily by an air scout, who would give word by wireless of its position.

Destroyers would then come tearing through the water at top speed and circle about the concealed foe, dropping bombs which exploded at a given depth, and these would crush the sides of the submarine like an egg-shell.

Of course, the planes and small dirigibles serve the same purpose in the Navy as they do in the Army, flying far above and ahead of a fleet to watch for any hostile battleships or cruisers. They are quite as truly the eyes of the Navy as they are the eyes of the Army.

THE DEVELOPMENT OF THE AIRPLANE

These wonderful machines, that can outfly any birds, were developed from crude models in a marvelously short period. It was only a few years ago that the Wright brothers were experimenting with little gliders that carried no engine and were launched against the wind from the sand dunes of Kitty-Hawk.

As boys they had played with a toy called the helicopter, a little device of twirling blades that rose a few feet when thrown in the air and then fluttered to the ground. That was their first introduction to flying-machines and it shows how the playthings of a boy can have their effect on the history of the world. The Wright brothers were of a mechanical turn and had built a little printing-press of strings and bits of wood. As young men they went into the business of repairing and building bicycles, and in their spare time they kept experimenting with gliders that were ridiculed by the people in their home town of Dayton.

They were not the first to build

gliders and launch themselves into the air, for the earliest legends tell of men who strove to fly, and attempts were made time after time to learn the secret of the birds. But Orville and Wilbur Wright were persistent and studious, and they had the advantage of all the experiments that had been made before. Also, they lived at a time when the right sort of motor had been discovered and they were able to equip their machine with a gas-engine after they had practised long enough with a They developed a device to balance the machine by bending or twisting the tips of the wings, known as warping. This was combined with the action of the rudder so that the machine could be controlled by pulling wires while the young flyer was stretched flat on the frame of the glider.

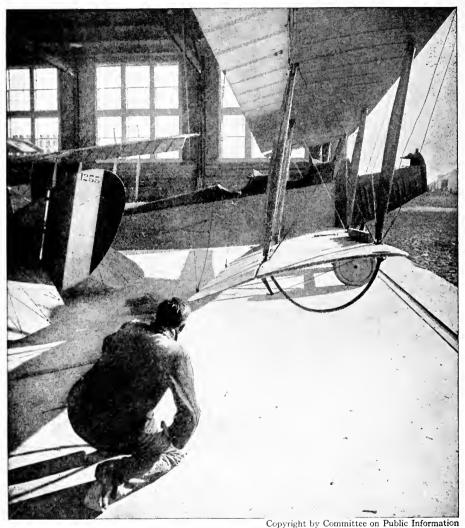
Not until they had learned to steer their plane and cause it to rise and sink in its short flights against the wind did they furnish it with a light gas-engine and propellers. Meanwhile they studied the actions of soaring birds, such as buzzards, that can swing for hours in the air, hardly moving their outstretched wings. And they studied all that had been written about the pressure of air on inclined planes, for these technical problems were needed to perfect their invention.

HOW AN AIRPLANE FLIES

The principle of airplane flight, they knew, was like the flying of a kite. A flat surface, or plane, held at an angle against the wind will rise. The kite is held against the wind by a string, and when a boy runs, pulling his kite-string, he supplies the necessary speed and force. That is what the motor and its propellers do to the airplane, driving the wings forward so fast that the air pressure will hold them aloft. But as a kite has a tendency to dive and wabble

and get out of control, it is supplied with a tail to hold it steady, or stabilize it. In the same way, the airplane must be steadied by different devices, and the most important of these is the warpblades of the rudder also direct it to one side or the other, just as a boat is steered by its rudder.

These are the simplest problems that had to be solved in constructing a flying-



Pandy for Flight

Ready for Flight

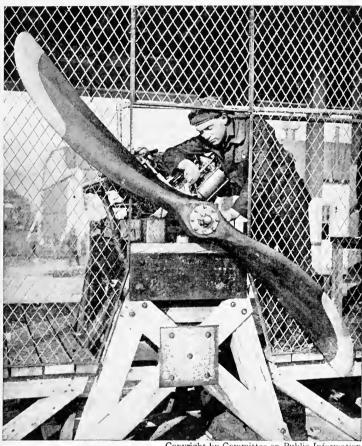
Airplanes at an aviation-field in readiness for practice flights. A cadet giving his machine a final inspection before going aloft.

ing wing-tip, which changes the pressure of the air from one side to the other as required. As the warping steadies it sideways, so the rudder steadies it front and back, and thus it can be made to rise and descend at will. The upright machine, but there were many very difficult problems that remained, and the present-day airplane has little resemblance to the crude device with which the Wright brothers first flew, with a motor, in 1903. The flight was

only for twelve seconds. Other attempts followed which were little more than hops from the earth, and the fourth flight was only for fifty-nine seconds. The crowds who came to look on did

went to France, where they were received with enthusiasm.

Meanwhile, other men abroad had been working on similar experiments. Santos-Dumont, a young Brazilian, had



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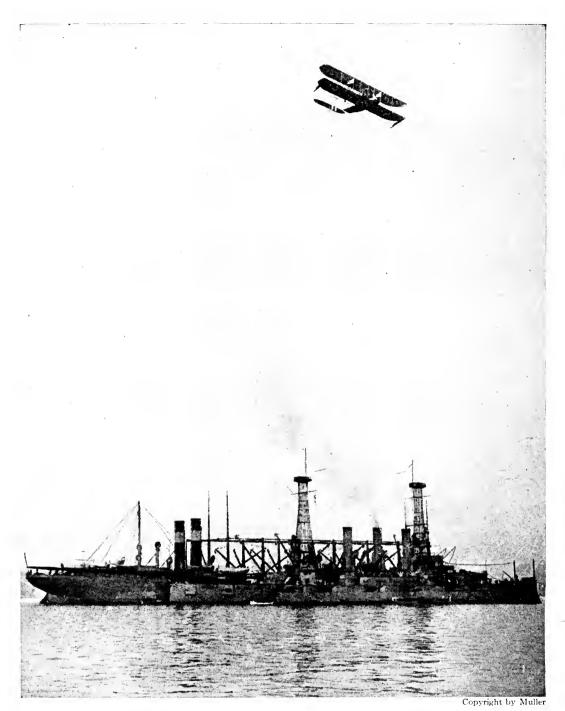
An Engine Receiving Its Final Test Before Being Placed in an Airplane

The screen is to guard the mechanician from injury by the whirring propeller.

not foresee that this was the beginning of the era of the air, and they went home laughing, but the Wright brothers knew that they had solved the problem and that what remained was to make their machine perfect.

They had little support in this country and their work was done at their own expense. So in the year 1908 they

been flying in balloons that could be steered and were therefore called dirigibles, and when the Wright brothers went to France they found this rival and several Frenchmen all working with different types of airplanes, or machines with only a single pair of wings. Yet the American boys were the pioneers in the field, the first successful flyers.



Fighting-forces in Two Elements

This photograph of Lieut. Alfred A. Cunningham flying over the United States battleship *Connecticut* shows in one scene two of America's agencies—one in the air and one on water. The *Connecticut's* speed is eighteen knots an hour and her complement is eight hundred and three men.

From 1908 to the present day there has been no lack of interest and thousands of minds have been busy solving the problems for which these lads were ridiculed in their early experiments.

Santos-Dumont had also been interested in flying as a boy. He tells about the game which he used to play with his little friends called "Pigeon flies." "All the children gather round a table and the leader calls out, 'Pigeon flies! Hen flies! Crow flies! Bee flies!' and so on; and at each call we were supposed to raise our fingers. Sometimes, however, he would call out, 'Dog flies! Fox flies!' or some other like impossibility, to catch us. If any one raised a finger then he was made to pay a forfeit. Now my mates never failed to wink and smile mockingly at me when one of them called, 'Man flies!' for at the word I would always raise my finger very high, as a sign of absolute conviction, and I refused with energy to pay the forfeit. The more they laughed at me the happier I was, hoping that some day the laugh would be on my side."

Like the Wright brothers, the South American boy had always dreamed of flying and made toy airships, and on the day when he first saw a balloon, at the age of fifteen, he determined that he, too, would soar in the air. At eighteen he was in Paris, where he hoped to find other enthusiasts, but nobody was thinking of flying at that time. The Parisians were interested in automobiles, which just then were the newest sensation. So he bought an automobile, and went back to Brazil, but rolling along the ground did not satisfy him.

A few years later he was back again in Paris, and this time he made an ascent in an ordinary gas-bag. Then he set about building an aircraft that could be steered and in 1898 he developed a cigar-shaped balloon driven by a small gas-motor. He was the first man to construct and pilot a balloon that could be guided back to the place from which it started, after making a trip of some length. He won fame by flying from St.-Cloud to the Eiffel Tower, three and a half miles away, and around it and back to the starting-point.

So we see that among the greatest names of the conquerors of the air were young men who had built up their inventions from their bovish play. To Santos-Dumont is due a great part of the credit for the dirigible balloon, which can fly against the wind and travel in circles, and which Count Zeppelin followed by the building of his huge aircraft that would carry many tons of dead weight and a large crew. To the Wright brothers much of the credit is due for the heavier-than-air flyers which can cross the Atlantic. alight upon the water, climb thousands of feet above the clouds, and perform wonderful flying feats that even a bird could not equal.

We must remember, however, that credit belongs to many other men who worked on these problems before them and to others who helped bring them to perfection. There are too many of these inventors to even mention by name here. And credit must be given also to hundreds of aviators who took chances or lost their lives in flying. By the accidents that caused their death, the mistakes in earlier machines were corrected and the bravery of these men helped to make perfect wings for mankind.

It would be a mistake to think of the aircraft only as a weapon of war. Their great value to humanity will be shown in the peaceful years to come.

"SOME" TOWN

Teacher (to little boy in geography class): Name a town in France. Boy: Somewhere.

MAGPIES IN PICARDY

By "TIPCUCA"

THE magpies in Picardy
Are more than I can tell.
They flicker down the dusty roads
And cast a magic spell
On the men who march through Picardy,
Through Picardy to hell.

(The blackbird flies with panic, The swallow goes like light, The finches move like ladies, The owl floats by at night; But the great and flashing magpie He flies as artists might.)

A magpie in Picardy
Told me secret things—
Of the music in white feathers,
And the sunlight that sings
And dances in deep shadows—
He told me with his wings.

(The hawk is cruel and rigid,
He watches from a height;
The rock is slow and somber,
The robin loves to fight;
But the great and flashing magpie
He flies as lovers might.)

He told me that in Picardy,
An age ago or more,
While all his fathers still were eggs.
Those dusty highways hore
Brown, singing soldiers marching out
Through Picardy to war.

He said that still through chaos
Works on the ancient plan,
And two things have altered not
Since first the world began—
The beauty of the wild green earth
And the bravery of man.

(For the sparrow flies unthinking
And quarrels in his flight,
The heron trails his legs behind,
The lark goes out of sight;
But the great and flashing magpie
He flies as poets might.)
——From The Westminster Gazette.



Painting by Norman Rockwell

Signaling

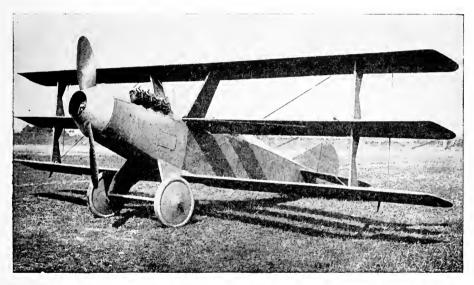


HOW IT FEELS TO FLY ABOVE TWENTY THOUSAND FEET

An English Aviator Tells the Effects of High Flying

"I HAVE found the effect of high—i.e., rarefied—air to be felt slightly at about 10,000 feet, increasing with the altitude. Breathing becomes affected, respiration shorter and quicker, there is a curious oppressive sensation and a

get very high without feeling giddy, and after returning from a flight to 12,000 feet I had palpitation, which lasted until the following day. In consequence I had to abandon high flying until treatment got me fit again.



A Pursuit-Plane

This is a powerful machine, and many of them were constructed for the United States Army.

bulging feeling in the head until the height of about 20,000 feet is reached. I am told by a medical friend who has made rather a study of the subject that there is always a risk of a sudden collapse, and oxygen should be used whether the aviator feels fit or not. Of course, the effect felt varies considerably with individuals and with the state of one's health. About eighteen months ago I suffered slightly with my heart, and found I could not

I have made a number of high flights and have felt no ill effects whatsoever; in fact, I find the more one gets accustomed to going up high the less the effects are felt. I am told that this also is the case in mountaineering. I can remember the unpleasantness of my first flight to 15,000 feet. It was very marked, especially the pain experienced in the drum of the ears on descending. The fact that a flight now to 21,000 or 22,000 feet does not have so much effect

I put down entirely to acclimatization. I use oxygen as a precaution when ascending beyond 20,000 feet, for the previously mentioned reason. A small bortle is carried, fitted with a special reducing valve, which is fixed in the fuselage within easy reach of the hand. No special regulation is required, as it is set to pass only the necessary amount of gas into the face mask, which acts as a mixing chamber, with its inlet and outer air valve. The apparatus weighs sixteen pounds, and contains sufficient oxygen for one hour's continuous use. After reaching 20,000 feet I find it only necessary to use the oxygen intermittently, and accordingly I simply hold the mask, after turning on the gas, over the mouth and nose and take a few breaths of it, perhaps every half-minute. The effect to me is remarkable; most of the oppressing feeling vanishes, and, excepting for the unpleasant bulging feeling of the head, which you experience with a bad cold, the sensation is one of suddenly being again at ground-level. The only aftereffects upon landing from these high altitudes are that you seem to acquire a pretty good thirst, due, I suppose, to the use of oxygen. If the speed of climb continues to improve at the rate it has for the past three years, it looks as though aviators will become subject to what is known as 'caisson disease,' due, I am told, to the sudden reduction in atmospheric pressure, such as divers are subjected to when they come to the surface from a great depth, owing to the nitrogen, which has been absorbed by the system, in proportion to the atmospheric density, forcing itself too rapidly at any lower pressure from the system."—CAPT. B. C. HUCKS.

"OLD BRADLEY'S" TALE

IT was late afternoon, the sun was relentlessly slipping lower and lower, and the shadows were stretching themselves out longer and longer across the clipped lawn.

"We'll be ever so late," whispered Nancy, happily. "It's almost tea time.

What will nurse do?"

"I'm sure I don't care. Why do you always bother about her?" returned Peter, loftily. It was all very well for Peter to be haughty; he was three years older, and, say what you will, it's different with boys.

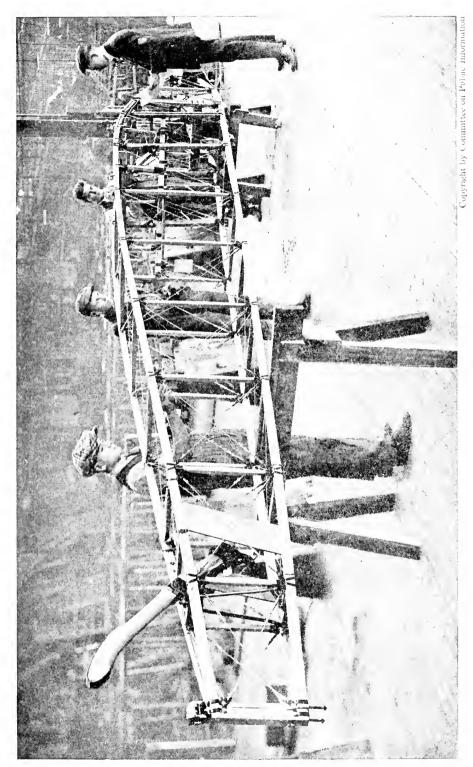
The children scurried along as fast as they could, over the broad lawn, through the garden, until they came to the garage, where they dropped panting at the feet of an old man who was sitting on an upturned box, near enough the open door to catch the odor of gasolene, which he sniffed wistfully from time to time. He was grumbling to himself:

"That boy of mine's a lazy goodfor-nothing. Don't know how these machines 'd ever get even oiled right 'f I didn't keep an eye on him."

"Hello, Bradley!" The children had flung themselves in an attitude of worshipful adoration on the ground. "We're going to catch it for this, but we haven't had a story for three days, and you've got to tell us one right now, no matter what the beastly nurse does."

The old man continued muttering about his worthless son and Mr. Archie's plane.

"Father says," the children continued, breathlessly, "that your fingers can see more than most people's eyes. And



Skeleton of the Body of an Airplane

Notice the mechanicians stringing the wire braces. The airman must study this and all other details of airplane construction.

he says that you can *smell* a grain of dust that gets into an engine."

The old man grinned. "Time was when Tom Bradley could take a motor to pieces and put her together in the time it takes most fellows to crank."

"Please hurry and begin; we haven't got much time, you know." Nan cast an anxious glance in the direction of the house.

"What do you want a story about?"

asked Bradley, unnecessarily.

"Why, the war of course, stupid!" shrieked the children. "We want the time you saw Guynemer brought down, and lots about Bishop and Ball, especially Ball. When you were just a boy hanging around the aerodrome until they finally let you help the mechanics." And Nan added, gently: "But please don't tell about the raid when the bomb knocked down the hangar where you were and put out—and put out your eyes. I always cry so."

The old man straightened up. His wrinkled face fairly glowed as he began to tell about those golden boys who fought so gloriously and madly. "Captain Ball," he began. "What a lad! How well I remember the first time he came into the aerodrome. He was a little chap, nervous, too; looked something like a boxer with his snubbed nose; he had eyes as bright as a starshell. Every time before he'd fly he used to spend an hour or more going over his machine oiling and tightening screws and bolcs. The only thing he lived for was flying. He spent all his time around the planes until they were just a part of him. And when he started out! Why, it was like a windstorm; nothing could stop him. He'd think nothing of going at ten or twelve Huns at a time. He'd dash right in, and they'd be scared of a collision and break their formation, and then he'd have them. I remember one day he'd sighted seven Boche machines and you

couldn't hold him back. He rushed up at them like an eagle. They scattered, and one got separated from the rest; Ball was after him in a flash and waited



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Major Raoul Lufbery

American aviator killed in France in 1917.

till he was within ten yards before he fired. The Hun fell, on fire. The others started for home; they'd had enough, with Ball right after them. Pretty soon five more German planes appeared and came at him. That was what he loved. You couldn't get odds too big against him. He attacked one of them, firing from eight yards; that one exploded. Then he turned on another; a few minutes later it crashed down on a roof

D. S. O., and he wasn't twenty-one." Bradley was finding it awfully hard to talk, somehow.

"And now, please, we would like Bishop's first fight, when he thought it was going to be his last, too," Nan said, happily hugging her knees, and rocking a little.

"Bishop, you know, was in Ball's squadron, so I used to see him a lot, too. You'd never think, to look at him,



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How Would You Like These Pets?

The American aviator, Major Lufbery, who was killed during the war, had two lions, "Whisky" and "Soda," as mascots. They used to follow him wherever he went.

in the village. His own machine was riddled with bullets, but that didn't worry him. The only thing that made him fly home was gas and ammunition giving out.

"His official record was forty-three airplanes and one balloon, but we all know that he must have had twice as many as that or maybe more. He'd won all the decorations there were, almost. The King himself gave him the

he'd be a fighter; he looked so kind of shy and quiet. But, Lordy! how he could fight! He would go straight at the German head on until the other swerved—he never did—and he figured that a Canadian had more nerve than a German. He was right, too. Then, when the Boche would turn to avoid colliding, Bishop would open fire; it always worked.

On his first fight he went up with

three other men. Two of them were old hands at it, the other was a beginner like himself. Pretty soon they ran into three German planes that looked ready for business. Bishop picked his man, and got him, too. The Boche dropped like a stone. Bishop suspected it was ard him and he jumped into a shell-hole. The soldiers came nearer and nearer, and suddenly, to his surprise and relief, Bishop found they were talking English. He had landed just one hundred yards inside the British lines."

"And he got seventy-two German



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Dinks, the Regimental Pet

This baboon was the mascot of the Royal Engineers in Africa. He landed in Belgium in October, 1914, and was present at the first and second battles of Ypres, at Loos, the Somme, and Passchendaele, and was once wounded.

a trick and dropped, too; he was right. The German thought he was safe and came up to look around. What he saw was the Canadian pouring bullets at him. In a few minutes Bishop had the satisfaction of seeing his first victim crash to the ground. But when he started for home he found that something had happened to his engine and he couldn't start it. He landed pretty soon, as he thought, behind the German lines. Some soldiers came running tow-

planes, didn't he?" asked Peter, awestruck.

"That he did," replied Bradley. "And he lived through it. It's a terrible death, is burning. That's what happens to so many; getting killed with a bullet's nothing compared to it. It's a mercy when their machine's afire if the men can get loose and jump."

"That's what happened to Lufbery, isn't it?" asked Nan.

"Yes," said Bradley, continuing en-

thusiastically. "There was a fine flier and a real man. All the time he was working, every minute training the Lafavette Escadrille and fighting, too, he was suffering with attacks of rheumatism that would have floored most men."

"We have to hear a little about Guvnemer before we go, and there's not much time left," said Peter, anxiously.

"The Ace of Aces," said the old man, solemnly. "There was no one like him. He was the idol of a whole nation. Such daring, such skill! He always flew alone in a little Nieuport that could keep up a speed of one hundred and twenty miles an hour, with the gun attached to the top of the airplane, just above his head. The sights were in front of him and he aimed the gun by pointing his plane. He would climb far above the enemy and then dash down at terrific speed, keeping him within the sights of his gun and firing rapidly.

"Any pilot as daring as he, so willing to attack as many as twenty German planes at once, must have narrow escapes. I myself saw that famous exploit in September, 1916, when no one believed that he could escape alive. He was fighting seven enemy planes, far inside the German lines, when a shot in the radiator put his motor out of commission. It stopped dead, fifteen thousand feet in the air and fifteen miles from his own lines. He pointed the machine toward home at as level

a slant as he could. The Germans, not realizing in what trouble he was, were glad to have gotten off so easily, and returned home. He was forced to drop lower and lower and the enemy antiaircraft guns sent a steady hail of bullets all about him. When he passed over the German trenches he was only fifty feet above them. A hundred yards away he could see his adoring poilus hanging over the embankment, unable to stand the suspense. He saw that he could never make it. His machine dropped heavily into a shellhole forty yards from the line. With a mighty shout, the French leaped over the top to the rescue, and after several minutes of terrific fighting they carried him back unrouched.'

"Oh!" breathed Nan. "And what really did happen to him finally?"

"Nobody knows, Miss Nan. One day he flew away and never came back. A lot of reports came in about him, but none of them agreed, and none of them was ever accepted. The peasants believe that he soared straight up to Paradise. Of course that's all nonsense," he added, hastily. "And yet who knows—who knows?"

The sun had quite disappeared. The children sat very quietly, looking up into the sky. . . .

"Miss Nan! Master Peter!" A shrill and familiar voice floated from the direction of the house.

"Oh, bother!" said Peter.

HMMY'S POST

A LITTLE New York boy from the East Side went to France early in the war. During one of the battles he was hit by a shell and mortally wounded. It was evident, when he reached the hospital, that he could live but a short time.

He was lying on his little white bed, nearly gone, when one of his "pals" happened along

Stooping over the boy, he whispered, "Jimmy, where were you hit?"

Jimmy opened his eyes and answered, "I was hit at my post." With these words on his lips he died, apparently satisfied in the knowledge that he had been "hit at his post,"

BALLAD FOR THE CHILDREN OF FRANCE

By Anita Moor

THE corn was ripe, the air was bright, The children made a dance, And you could hear, from far and near, The happy songs of France.

A gray wave came and swept the plain, A wave of armed men, And where it flowed no harvest glowed, No children sang again.

But here and there were fields as fair As if no war had come; A village stood, or farm, or wood, And here and there a home.

Two long years passed; the guns' loud blast Far-sounding told of strife; But undismayed the women stayed And led a valiant life.

Like devils came gray men again, And bound each maid and child. For slaves they went; the air was rent With lamentation wild.

Oh, wild outbursts the mothers' curse, Bewailing their advance; But brave in praise the children raise The undying song of France.

THE INVISIBLE ENEMY

The Submarine: A Jules Verne Dream Come True

By C. L. Edholm

MANY years ago a small boy sat dreaming over a book. He read and reread the story, each time with Sometimes he put it more interest. aside, and with lips pressed tightly together in his eagerness he would whittle and nail together bits of wood to form a boat. It wasn't a mere flat piece of board with an upright stick for a mast and a paper sail, for Simon Lake had been reading Twenty Thousand Leagues Under the Sea, and his dream was of a wonderful craft that would live under the waves. But he was the sort of boy who was not satisfied with a dream. He wanted his dream-boat to become a-real one, like the Nautilus in the story, which could dive under the water and cruise around among the fishes and then come up when he wished.

Long before the electric motor was perfected Jules Verne felt that some day it would be in common use and he fitted his boat with machinery run by electricity. He had imagined electric lights before the present devices were known to the world. But it was all in a story and people smiled at the wild fancy of the author.

When Simon Lake built his toy boats they refused to dive and remain under the sea, or rise to the surface at the wave of his hand; his must meet the laws that ruled the waves.

"Some day I'll build a boat," said the lad, with glowing eyes. "I will live in it and hunt for treasures. There are lots of sunken vessels with gold and money. I'll find them and be rich." But it was not for such peaceful work that the boy's queer boats were to be used in later days. They became weapons of war, to kill and destroy.

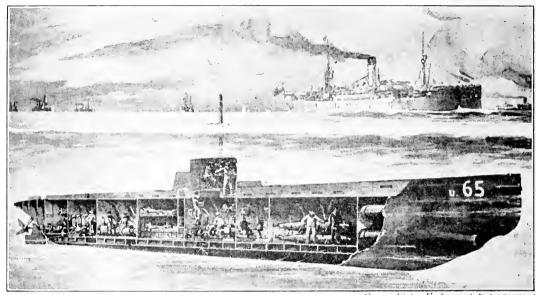
For, many years before the Great War, Simon Lake and another American, John P. Holland, were known all over the world for their submarine inventions. Their boats were so much better than any other that had been built that many countries used their ideas in building submarines, until every nation had boats of either the Holland or Lake type.

No one realized, when the World War started in 1914, that these small boats were to take so important a part. Until this time the nations did not dream of the power that lay in their submarines. It was a new plan of warfare which had still to be tried out.

In the second month of the war the British fleet was standing guard in the North Sea. England knew that this fleet was the largest in the world and she hoped to bring about a naval battle in which she could end the war. she sent a submarine into Heligoland Bay and sank a German cruiser. But if this action was a challenge to the German fleet to meet them in the open sea, it failed in its purpose, for the battleships of the enemy stayed in their ports. Germany was not to be tempted in this way. Her submarines could slip out unseen and steal silently upon their prey and destroy it.

But her first attack on a British squadron was a failure. The submarine reached the desired spot and sent a torpedo at one of the battleships. But the torpedo missed its mark. A British cruiser sighted the enemy craft, a shot was fired, and in a moment, although it made a quick dive, the submarine was struck and its periscope torn away. Now the periscope takes the place of eyes in an under-sea boat. And with came to the surface a shot from one of the destroyers carried away the conningtower and the submarine and crew were lost.

But very soon after this came a triumph for the Germans. The boys on the British fleet in the North Sea had been complaining of monotony.



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The U-boat Submerged and Prepared to Fire a Torpedo at One of the Ships of the Allied Convoy

its sight gone it was left fumbling like a blind man, not knowing which way to turn for safety.

One can imagine the anxiety of the crew in that injured submarine. But it had a good chance left. It could continue under the water and perhaps get away without further injury. But it might be running right into the path of a pursuing foe. They didn't dare to take that chance.

The only thing left to do was to make what is called a "porpoise dive," that is a quick appearance at the surface, just long enough for the officer in the conning-tower to see his position and then submerge. This was done, but chance was against it. As soon as it

They wanted "something to happen." They hoped that the German fleet might be coaxed out for a sea battle.

SUBMARINE SINKS THREE CRUISERS

At one point three war-vessels, the Aboukir, the Cressy and Hogue, were together in this dreary waiting, when one day a loud explosion was heard and the crews of the Cressy and Hogue saw that the Aboukir had been struck by a torpedo and was sinking. They, of course, hurried to the rescue of the crew. This was just what the German submarine officer had hoped for. From a distance he watched, through his periscope, the two boats coming nearer.



From Leslie's Weekly

Between the Doomed Ship and the Sun

The doomed ship sees the glorious sun before it, but between it and the sun there is a slinking little vessel, a cruel German submarine, which may send it to the bottom.

Two more torpedoes were fired. They hit their mark and the Cressy and Hogue were also destroyed by this unseen enemy.

The nations now began to understand the power that lay in their submarines.

These boats were small, they were not nearly as expensive to build as a battleship. They carried only twentysix men, while a battleship may carry

a thousand or more. Yet they could be sent out and destroy a battleship, and in most cases get away unharmed. This success made Germany keen for further trials of this sort. They had nothing to lose but the inexpensive U-boats, for their fleet was safe in port and they had now no merchant-vessels on the seas.

So their raids into English waters were bold and frequent and the damage they caused by torpedoes and by mines placed in the channels was a great anxiety to the Allies.

It was the hope of the German government to blockade England, keep all vessels, both English and neutrals, from carrying food to that country, and thus in a very short time starve her into surrender. In order to do this Germany announced a still larger torpedo zone. She was increasing her submarine fleet at a tremendous rate. The zone included the English Channel and all the waters around England and Ireland, and every Allied vessel entering that zone was liable to be sunk.

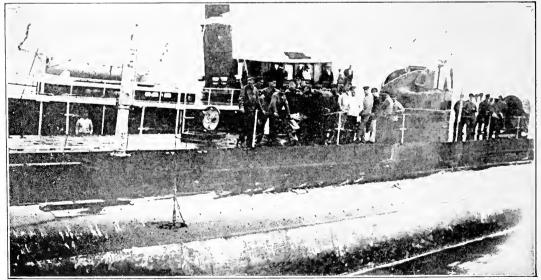
There was little loss of British warvessels, but many merchantmen carrying food and munitions were destroyed. Even small fishing-boats were ruthlessly sunk. At first the merchantmen were not armed, as they depended on the fleet of England to protect them, but the submarines were able to get by the guard of war-vessels and there was no way of stopping them. Such guns as

the merchant-ships could carry were then supplied, and although these ships were not built to take the proper equipment for guns that could hit at long range, they beat off some attacks.

GERMANY SINKS NEUTRAL SHIPS

Germany had promised her people that within three months England would be begging for peace. But many months had gone by and still the country was getting enough to eat and showed no sign of giving up. Instead of that she was getting munitions, and a large number of troops were being sent from her colonies to be used against Germany on the battlefields of France.

Germany sank more and more neutral vessels just on the chance that they might be carrying supplies to England. These vessels were treated as though they were enemy boats. A neutral ship might be taking supplies to its own country when, without warning, a torpedo from a submarine would tear it to



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The U-boat Deutschland

The famous German submarine which astonished the world by creeping under the Atlantic to Massachusetts, where its captain took on considerable quantities of materials needed by his country.

pieces and leave its crew struggling in the water.

May 1, 1915, the first American steamer, the *Gulflight*, was sunk in this manner. The United States was indignant at the crime, and Germany was asked to explain. But a few days later, May 7th, one of the most terrible deeds of cruelty during the whole war was committed by the Germans. It was the sinking of the *Lusitania*, one of the huge modern liners under the British flag, carrying twelve hundred and fifty-seven passengers.

While the great steamer was peacefully making her way through the seas, a few miles off the coast of Ireland, a foe was lurking unseen, waiting to destroy it. The sea was calm, the weather clear, and the passengers suspected no danger. Suddenly the captain heard a cry ring out, "There is a torpedo coming, sir!" and a streak of foam was seen rushing through the water toward the side of the ship. A torpedo struck the vessel almost immediately, and another followed a few seconds later. In twenty minutes the Lusitenia had gone down.

Eleven hundred and ninety-eight lives were lost, among them many women and children, and even babies in their mothers' arms. Of the dead, more than a hundred were American citizens. This murderous act shocked the world and was the outrage that prepared our people for war with Germany. By insisting on her plan to destroy American lives and ships Germany forced war

upon the United States.

This country in former years had a friendly feeling for Germany. While we were still neutral, the *Deutschland*, a merchant submarine, crossed to America and was received with the greatest courtesy. The perilous trip through

the war zone was considered a plucky thing to attempt, and the people here liked that sort of pluck.

In fact, until this nation entered the war it treated Germany too well. The Deutschland brought a cargo of dyes and chemicals and took rubber and metal

on the return trip.

In spite of this fair treatment Germany continued to sink American and other neutral vessels and the United States began to feel unfriendly and even hostile toward her.

GERMANY'S SUBMARINES OFF AMERICAN COAST

When, in October, 1916, a submarine suddenly appeared off Newport, Rhode Island, people asked why it was there. They had begun to distrust a nation that could sink the unarmed vessels of a peaceful country. And when this boat rose from the water and displayed the German flag every one had the feeling that it had not come as a friend. The boat entered the harbor. It had called to deliver a letter to the German ambassador. There was nothing against the law of nations in this. Its stay was short. In three hours it was out of the harbor, without taking on supplies of any sort.

But the next morning it was heard of again. It was sinking merchant vessels off the coast of America. This seemed like a threat and the United States resented it. One of our destroyers watched the sinking of an unarmed vessel, a neutral, and yet had no right to interfere, as they were beyond the three-mile limit.

Five steamships were sunk; three were British, one Dutch, and one Norwegian, and for some reason an American vessel was stopped and then allowed to go on her way. In the case of the other vessels, they were torpedoed without warning and the crews left to perish. American ships came to the rescue; the

Submarine-defense Nets

Nets were used to protect harbors and bays. Some of them were also placed in the open sea. These nets, which were stretched across the entrance to a harbor, were made of strong wire cables.

crew of the first British vessel was picked up by the Nantucket Shoals lightship, after which United States torpedo-boat destroyers went out in search of the remaining victims, and saved them.

While no American ships were sunk at this time, the fact that the submarines had landed in one of our ports did not tend to make friendly feeling. Notes were being exchanged between the two countries. The United States was trying, if possible, to come to some understanding with Germany and cause that nation to follow the laws of civilized warfare.

On January 31, 1917, came the decisive note from the Kaiser's government. It was defiant: "From February 1, 1917, sea traffic will be stopped with every available weapon and without further notice."

Finally relations between the two countries were broken and, as the ruthless submarine campaign kept up, war was declared by President Wilson on April 6, 1917.

FIGHTING THE GERMAN U-BOAT

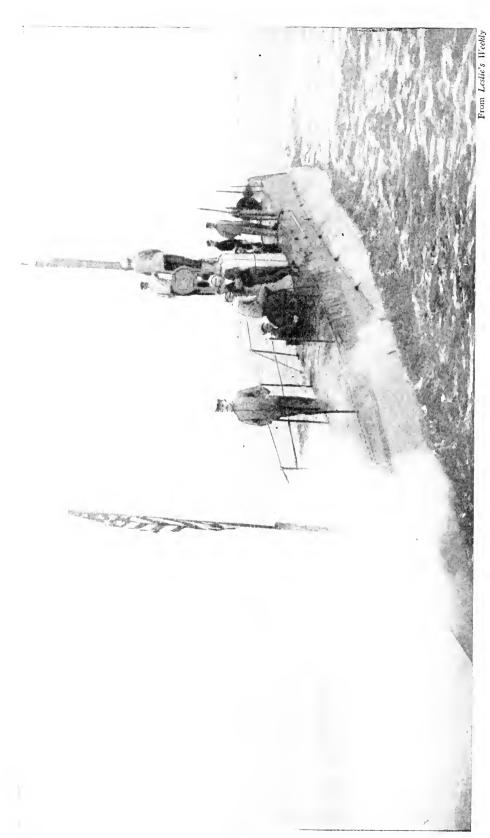
But it must not be supposed that Germany was having everything her own way all this time. Very strenuous methods were being used by the Allies to stop this U-boat war. England kept an enormous fleet of patrol boats on the seas, and these light, speedy little craft did their part in checking the shipping loss.

One method of destroying the submarine was to disguise an armored vessel as a merchantman or trawler. Such a vessel would be sent out to decoy the enemy craft. When a submarine approached such a disguised war-vessel, believing it to be an easy victim, the disguise would be thrown off and a rapid fire of powerful guns would send the U-boat to the bottom. Another method used by the merchantmen was to ram a submarine. When a U-boat was sighted, instead of turning to flee, the steamship would make straight for its enemy and try to crush it under the bows. It was for such defense as this that Captain Fryatt was shot when captured by the Germans. A gold watch had been presented to him for sinking a submarine in this way, and the story engraved on the watch was used as evidence, against Captain Fryatt by the Germans.

The small guns on destroyers and merchant vessels kept up a fight on the submarines. Nets were used to protect harbors and bays. Some of them were also placed in the open sea. These nets, which were stretched across the entrance to a harbor, were made of strong wire cables. A number of buoys were attached which gave a signal whenever the net was disturbed and patrol-boats were on the lookout to give chase. Mines were planted near the nets which would explode when touched by a U-boat.

Perhaps the greatest enemy of the U-boat was found to be the airplane, and this hunting of submarines by the great sea birds was a thrilling adventure for the youths of the Allied countries.

From a height directly above it a submarine could be plainly seen under the water and airships were sent out as scouts to report on the position of these hidden boats. They also accompanied all convoys, searching the sea in all directions around the troop-ships. At first they could only signal to nearby destroyers, but later in the war bombs were invented which explode at any desired depth. The bomb has a device like a propeller. As it sinks into the water the propeller turns until it screws to the end. There a fuse-pin is touched and sets off the explosive. These bombs are so powerful that if they explode



Coming to the Surface After Firing a Torpedo

To bring the submarine to the surface the water in the tanks is pumped out by compressed air. This makes the boat light enough to float, and it rises to the surface, controlled by the rudders.

within fifty yards of a submarine they can destroy it, the pressure of the water crushing the vessel like an egg-shell.

Camouflage was also a check against the torpedo of a submarine. To see a warship, which has usually a majestic appearance, decked out in all the colors of the rainbow or striped like a zebra was an odd spectacle. Some of the ships were painted with confusing black and white lines to deceive the enemy. The officers on a submarine, watching through a periscope, could not tell which way the vessel was going or at what speed. This made the chances of hitting it very uncertain.

A recent invention which is a great enemy of the submarine is the microphone. This instrument records soundwaves coming through the water to a distance of fifty-five miles. With these in use, the commander of a vessel could tell if a submarine was approaching and could have patrol-boats and destroyers ready to attack it.

Before the armistice was signed the U-boat had been pretty thoroughly defeated. The number destroyed by the Allies was purposely kept secret so as to strike terror into the Germans. Submarines would put out to sea and never again be heard of, and it was believed that this did much to discourage the enemy in its outlaw raids.

The final blow to the submarines was in preparation. It was to be a fierce attack by fleets of aircraft on submarine bases. This had been tried out at Zeebrugge, when great numbers of airplanes dropped bombs in the harbor and put that submarine nest out of commission, and if the war had not come to an end that method would have been used to completely cripple the U-boat bases.

The submarine, which had been Germany's last hope of victory, failed to get results. Millions of troops were sent abroad by our country in spite of Ger-

many's boast that if America entered the war she would not allow a single American soldier to get across. In this great test the U-boat was a failure.

EARLY STORY OF THE SUBMARINE

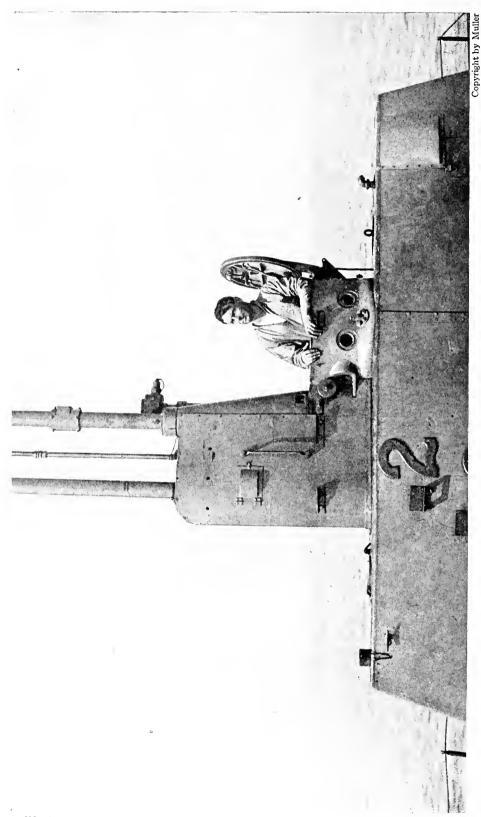
We are apt to think of the submarine as a very new invention, for this was the first war in which it had been used to any great extent. But the idea is very old. Men have been working on models of submarines for hundreds of years. Washington had thought "very highly" of David Bushnell, who had invented a submarine, and, while the test had been a failure, the great man still thought the plans were good.

At any rate, each trial started others thinking along the same line, and just as a wall is built up brick by brick, so one man and then another added his discoveries and left them for the next generation to advance a little farther.

France has always been interested in building submarines and it was there that another American, Robert Fulton, the developer of the steamship, got support from Napoleon to build a boat. It was finished in 1801. An old ship was given to him to practise on by the French government. It was towed out into the harbor, and Fulton's submarine blew it up, thus proving its value as a war weapon. Yet nothing further was done with it.

During the Civil War, sixty years later, the U. S. S. *Housatonic* was destroyed by a Confederate submarine. This was an attempt to raise the blockade against the South. But the little boat, though it gained its object, was caught under the sinking vessel and destroyed with it.

Fulton's boat was a one-man boat and was driven by hand-power, but the one that sank the *Housatonic* held several men and was propelled by an engine.



Waiting for the Command to Dive

When a boat is to be submerged the ballast-tanks, or compartments, are opened to the sea and must be completely filled. The submarine is then in what is called "diving trim," ready to be sent under the water.

OPERATING A SUBMARINE

Steam-engines took the place of the hand-driven machinery on the sub-marines, but it was found that the boilers made the atmosphere too hot in the inside of the boat when it was sent under the water. The gasolene-engine was a great improvement over steam, but it was recently replaced by the Diesel engine, which burns crude oil.

For running under the water, electric motors are used. These get their power from storage batteries. One disadvantage of the electric motors is that when the batteries need recharging it is necessary to come to the surface, where the Diesel engine is set going to run the electric motor and generate the electricity for the batteries. Sometimes a boat that is recharging is sighted by a destroyer and has to dive in a hurry.

The method for supplying fresh air in the boats has been greatly improved in recent years. Seamless steel flasks or tanks are carried, which are filled with compressed air at a very high pressure. When more air is needed in the boat the compressed air from the flasks is passed through valves, which reduces the pressure before it enters the room.

The air is purified by a chemical, which absorbs the carbon dioxide, the poison exhaled in breathing, while compressed oxygen is released from the steel flasks to replace what has been used up.

The system of ballast is interesting, and this is an important feature in the operation of a submarine. In the single-hull boats water-tanks are built into the interior of the boat, and in the double-hull vessels the space between the two hulls takes the place of tanks.

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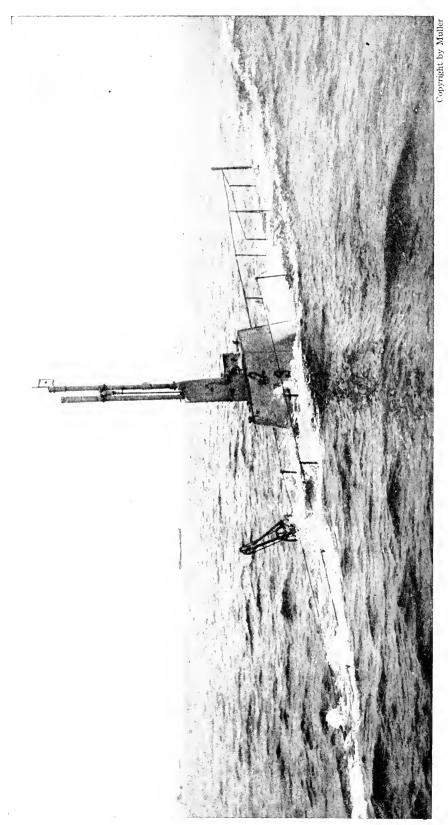
in what is called "diving trim," ready to be sent under the water.

To submerge the boat, diving-rudders are put into use. These are so arranged that when the diving-wheel is operated the stern of the boat is raised and the bow dips downward into the water. It can then be steered to any depth. When well under the water the rudder is shifted to bring the boat into a level position.

To bring the submarine to the surface, the water in the tanks is pumped out by compressed air. This makes the boat light enough to float, and it rises to the surface, controlled by the rudders. In case of accident a rapid way of emptying the tanks is to put pressure of air from the air-storage flasks into the main ballast-tank, which forces the water out through the blow-out valve.

The balance of the submarine has to be figured very closely. When materials of any sort are used up, such as gasolene or crude oil, the loss in weight must be made up by allowing the tanks to fill with water from the sea. These are called "compensating tanks." It is also necessary that the weight be placed at about the same point from which it is taken. When gasolene or oil is used up, a tank placed in the proper position and known as the "fuel-compensating tank" is filled with water, and when a torpedo is discharged water is brought into the torpedo compensation tank to make up the weight which has been lost by the torpedo leaving the boat.

To Simon Lake belongs the credit of solving one of the problems that have made the submarine practical. After many plans had been tried, a cigar shape had become the usual form for a submarine. This was found to work all right in harbors, but it had the defect of not being able to rise with a big wave. So Lake built a double hull for his boat, the inner one cigar shaped and the outer in ship form. The space between the two hulls formed the water-



A Submarine with the Conning-Tower and Periscope Showing

From the distance this might look just like a broomstick. When the British boats tried to ram submarines which showed themselves a bit above the water, the Germans placed false periscopes in the ocean, which, when rammed, exploded a mine and sent the boat to the bottom of the sea.

tanks, which could be opened and closed. This shape is now used in all the late types of submarines.

When a boy, Lake had decided that his boat was to have a diver's room, like the one in Twenty Thousand Leagues Under the Sea. From this room the diver could open a door and step out upon the ocean bed. Years afterward he arranged such a room in his boat. By putting an air pressure on this compartment equal to the pressure of the water from the outside, the door in the bottom could be opened and no water enter.

THE EYE OF THE SUBMARINE

The eye of the submarine is the periscope, a tube arranged with mirrors that reflect the objects above the surface so that they can be seen from within the submarine while it is under the water. Until recently the periscope was very crude. It got out of order easily and it was not possible to see with it for any great distance. The tube is about six inches in diameter and can be raised eighteen or twenty feet above the surface of the water. Under ordinary circumstances periscopes project three or four feet above the water when the vessel is under the water. With the periscope at a height of twenty feet, the officer in charge can see a battleship six miles away, while one raised a foot above the surface has a range of 2,200 yards.

Most of the submarines are now fitted with two periscopes and often three. The last one is called the zenith periscope and is made to detect airships. One periscope is for the commanding officer and the other for the steersman. In the tests made it was found that the periscope could not be seen at any great distance, but the white foamy wave made by the tube cutting through the water was visible,

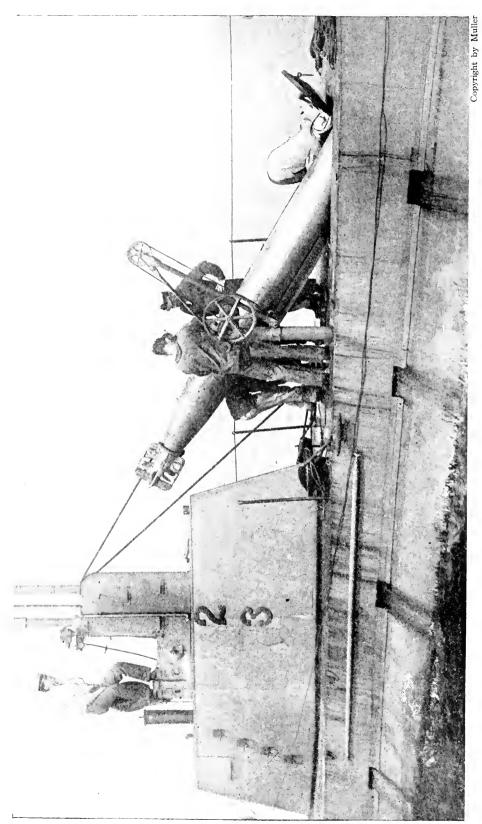
and it was from this trail in the water that a battleship could often tell that a submarine was near. Now the top of the periscope has been made smaller, measuring only two inches wide, and the wave left by this is not so plain. In each of these tubes there is a plateglass seal at the lower end inside the hull of the boat. In case the periscope is shot away the seal prevents the water from entering, and as it allows the light to pass through it does not interfere with the vision.

The danger in running a submarine has been greatly lessened. A device called the telephone buoy has added to its safety. This is particularly useful if a boat is at work on a sunken vessel or in a harbor. The buoy holds a regular telephone set and is connected with an instrument inside the boat. When an accident occurs to the submarine the buoy is sent to the surface of the water. This carries a flag to attract the attention of a passing boat and a striking or bell signal is operated from the batteries inside the boat and can be heard at the receiver of a submarine signal apparatus on shore. When a submarine is thus located the crew in the boat on the surface can talk through the telephone with the officer of the submarine, find out the trouble, and bring help.

Since the war most of the submarines are fitted with a wireless outfit, but this only works within a distance of one hundred and sixty miles.

DISCHARGING A TORPEDO

The early submarines had only one torpedo-tube and carried two extra torpedoes, but the late types have from eight to ten tubes, with a large supply of torpedoes, so that they can stay away from their bases for weeks at a time. Most of the tubes are for firing eighteen-inch torpedoes, which have a



Replacing the Torpedo in the Tube

The torpedo has a propeller and operates somewhat like a little submarine. The Germans used it with deadly accuracy on unprotected merchant vessels.



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Discovering a Floating Mine

Officers looking over the side of an American ship find a mine.

length of seventeen feet, but some of the newest type carry torpedoes measuring twenty-one feet.

In loading a torpedo a water-tight cap at the outer end of the tube is closed. The torpedo is adjusted for firing and placed in the tube from within the boat, and the inner cap shut. When the torpedo is to be fired the space in the tube around the torpedo is filled with water from a filling-tank which has already been arranged inside the boat. To discharge the torpedo, pressure from the compressed-air flask is forced into the tube behind the torpedo and it is driven out at a speed of about thirty knots an hour. In leaving

the tube a lever on the torpedo is pulled over and this starts the engine in the projectile.

HOW A TORPEDO IS OPERATED

When once out in the water the torpedo operates like a miniature submarine, having its own engine, steeringgear, and depth-gear. The cigar-shaped torpedo is divided into three sections. The tip end contains the explosive, the center part is filled with compressed air to run the machinery, and in the tail end are the engine and steering and depth gears. When the tip end strikes any solid body in the water a firing-pin sets

off the explosive. To prevent any accident to the boat from which the torpedo has been discharged, the firing-pin is locked until a distance of one hundred and fifty feet is reached; a tiny propeller on the pin turns and unlocks it at that distance.

Before placing the torpedo in the tube on the submarine, the depth-gear is set. This depth differs according to the object at which one is aiming. For some boats, such as a destroyer, a depth of five feet is required, and for a battleship it is necessary to hit at a depth of fifteen feet to get below the armor belt. The device for setting this depth is somewhat like an alarm-clock. There is a dial with figures on it, up to twenty, and whatever depth is wanted the dial is set at that number.

THE GUNS OF A SUBMARINE

All the submarines used in warfare have at least one quick-firing gun to defend themselves against small boats and airplanes, and some have two. These are mounted on the deck. In some cases a water-tight box is fitted over the gun. To bring the gun into firing position the cover of the box is opened and the gun raised. In other boats the guns are left uncovered and open to the sea. A third system of placing the gun is inside the boat; these can be raised and fired and then disappear again.

SUBMARINES THAT LAY MINES

There are special submarines for laving mines. These boats are different from the ordinary submarine in having two wells or tubes running down through the boat from the deck to the keel. These tubes are open to the sea. Six mines with their anchors and cables are placed in each tube, a device at the bottom holding the mine in until the desired spot is reached. There they are let out one by one. Each mine is fitted with an automatic device for keeping the mine at a certain distance below the surface of the water.

When a ship comes in contact with the mine it explodes a charge powerful

enough to sink the vessel.

Thus the contest between inventors goes on. When the first ironclad was brought out it was considered safe from attack, but the Monitor was invented to destroy it. When the torpedo-boat was developed it was followed by the torpedo-boat destroyer. When the dirigibles were used in war the air-planes were fitted to bring them down. And so when a submarine was perfected nets were spread to entangle it, and soundmagnifiers made it possible to hear its approach. The airplanes could detect it from above and the depth bombs could smash it far below the surface.

So the battle of wits continues, and as fast as a deadly weapon is discovered a new defense is perfected to oppose it.

WHERE PAT WAS

The letter said, "Dear Mother,—I am now in the Holy Land."

-The Argonaut.

N a small village in Ireland the mother of a soldier met the village priest, who asked her if she had had bad news. "Sure, I have," she said. "Pat has been killed."

"Oh, I am very sorry," said the priest. "Did you receive word from the War Office?"

"No," she said, "I received word from himself."

The priest looked perplexed and said, "But how is that?" "Sure," she said, "here is the letter; read it for yourself."

CAPTURING A SUBMARINE SINGLE-HANDED

He Thought Being a Marine Policeman Was Dull-Until-

ROLLING slowly on the cold gray swells of the English Channel, westward over a certain number of miles of waves, then back eastward over the same miles, steaming steadily to and fro like a policeman over a lonely beat, a trawler was patrolling monotonously, the young lieutenant who commanded her scanning the tossing surface about him as a detective scans the faces of a crowd.

Nothing relieved the monotony of the rhythmic rise and fall of the boat and the westward and eastward patrol except an occasional British or French cruiser and the regular exchange of signals with other patrolling trawlers as either end of the beat was reached.

The young lieutenant had plenty of time to growl inwardly at his luck. Why was he not on some great battleship where there was at least room to stretch his legs, where one could keep dry, and where there was some slight chance of battle, instead of on this bobbing tub where there was not room to whip a cat, where every wave drenched all on board with spray, and where there was never a show for any sort of fight? What opportunity was there here to do anything that might win promotion, higher pay, a medal, a few days' leave? He had entered the navy because he wanted to have a part in the fighting, and here he was doing the work of a marine policeman!

A white streak—different to his practised eye from the white streaks of breaking waves—tore through the water, coming straight toward him.

A shock, and it seemed as if an earthquake had struck the trawler. An explosion smashed her to bits in an instant, and the young lieutenant found himself swimming with bits of wreckage and dving men about him.

Slipping out of the hampering folds of his greatcoat, he swam. He saw some of his men seize bits of wreckage and drift away. He saw the mangled bodies of others bob up for an instant in the trough of a wave. There seemed no piece of wreckage big enough to support him. But he was a strong swimmer, and he kept afloat. He did not know in what direction he was swimming; he just swam.

Suddenly his feet struck something solid. He pushed back on it and gave himself a forward spurt, but as he extended his feet backward again they touched that solid submerged something a second time. He rested his feet against it, and it seemed like a great, smooth rock. But it was moving! It was coming up under him! "The submarine that sank us!" This thought flashed into the swimmer's mind. Turning quickly in the water, he saw already above the surface a pair of periscopes and the top of a conning-tower, with the seawater streaming down them as they rose.

He ceased swimming instantly, and braced his feet upon the slippery solid, which he knew now was the deck of the U-boat that had just sent his vessel and crew to the bottom. As it came up he came up with it. A few seconds more, and the conning-tower was out of water and the decks were awash.

The eye of the lieutenant was fixed upon a little narrow trap-door, expecting every instant to see it open and the head of the German commander emerge. He drew his Colt's automatic pistol from its case and pointed it at the door. (The modern naval pistols are water-proof.)

door. Still holding his pistol pointed toward the single exit, he squatted upon the shoulders of the dead commander whose legs dangled down the ladder and might be pulled in by the crew below.

He waited for the second head to emerge. There were five shots still left



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A Visitor from General Pershing's Headquarters

Bishop Brent, senior chaplain of the American Expeditionary Force, visits the New York to present General Pershing's compliments to the Navy.

Scarcely were the waves pouring off the glistening steel of the deck that was now above the surface than the door swung open and the face of a German officer appeared. The automatic pistol barked once and the German lurched forward. Springing upon him like a cat, the young Briton seized the body of the enemy, that it might not be drawn back down the ladder, and so make it possible to close the door and submerge again. He had aimed to kill and had made a bull's-eye.

The body blocked the closing of the

in the magazine of his pistol, and he planned that five more Germans should die. They must come up in single file. The doorway was so narrow that there was not room for more than one at a time.

He squatted and waited, holding his pistol pointed through the open doorway, that could not be closed because it was blocked by the body on which he sat.

Minutes passed. Still the second head did not appear. Would they rush him? Would they wait until he was too stiff with cold and wet to shoot straight? He thought of what the Germans below must be discussing. There were enough of them to overpower him if they could get at him. They could not know how many cartridges he had in reserve. They must know that the first five at least who came up would be killed. Were there five of them brave enough to commit suicide? For coming up the ladder would be sure death.

And still he waited. He expected they would rush him, and he was ready. But nothing happened. All was silent, except for the splash of the choppy waves on the metal deck of the manmade sea monster. Minute after minute passed.

The tension was great and the lieutenant lost all track of time. Motionless and wet, he began to feel numb.

But his right hand holding the pistol never shook, and he never took his eye off the doorway.

After an interminable wait he became aware of a stream of smoke over the waves. Turning his eyes away from the doorway for an instant he saw a British destroyer darting swiftly through the water and coming in his direction. He stood up and waved his hand. A toot from the whistle informed him that he had been seen.

In a few minutes the destroyer was alongside. The lieutenant, amid the cheers of the destroyer's crew, turned over to its commander the prize he had captured single-handed, intact, with all her crew save the one dead officer as prisoners. The Victoria Cross was his reward.—Arthur Bennington in *The World Magazine*.

LAND BATTLESHIPS CALLED TANKS

How the Peaceful Farm Tractor Became the Most Effective Weapon of the War

By Austin C. Lescarboura

SURELY you have had a surpriseparty at some time or other. And you know how it felt to be treated to something you did not expect. At first you did not know what to say or do, until your surprise wore off.

It was in the early misty morning of a September day in 1916 that the Germans were treated to a real surpriseparty. It was not a pleasant affair, to be sure; for you must remember that they were at war with the British and French and other Allied countries. The Germans were in their well-constructed trenches, with numerous machine guns ready to mow down the masses of British troops that might come up to the German barbed wire. They knew that

the British soldiers had to hack their way through the thick strands of barbed wire before they could get near the trenches, and while the enemy were thus engaged, the German machine-gunners and riflemen had only to turn their fire on the struggling khaki-clad masses out there in the open. The Germans had done it so many times before that it was a matter of routine or habit; and they were ready to do it again in their systematic way of doing things.

Suddenly the German soldiers heard a strange clanking sound, accompanied by the muffled chugging of a gasoleneengine. It was not an airplane, for the sounds were too slow. It was not a motor-truck, for such vehicles were



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A Tank in Action

Early one morning in September, 1916, the German soldiers saw black, almost shapeless, masses moving steadily forward toward their trenches, spitting fire. They were the first tanks of the war.

miles back of the lines. What could it be?

They had not very long to wait. Out of the early-morning mists in No Man's Land there came black, almost shapeless, masses moving steadily forward despite the shell-holes and abandoned trenches out front. These masses of

black pitched and rolled, but still they lurched forward. And, now that they were nearer, they began to spit fire. Here and there Germans fell, either wounded or killed outright. On and on came the black things, until they smashed over the trenches, crushing those Germans who were too surprised to flee. The British soldiers came with these steel monsters; but the Germans were too surprised and scared to bother about the Britishers.

Thus were the first tanks introduced. It was the greatest surprise of the war. Even the British soldiers and generals at the front did not know about the tanks.

In fact, so great was the surprise that, had the British possessed three hundred tanks instead of somewhat over three dozen, the war might have been won by the serious defeat of the German forces in France. But as it was, there were not enough tanks to surprise the Germans over a wide front; and the local advantage gained by the British only served to put the Germans on their guard for other tank attacks all along the line.

TRENCH WARFARE AND THE TANK

Before telling the story of the development of the tank, one must first know the conditions that caused the tank to be developed. So we must go back to the subject of trenches and the means of defending and attacking those little fortresses of dirt and sand-bags and hard work.

When the Germans were checked and thrown back by the French and British at the first battle of the Marne in September, 1914, they fell back some distance and dug themselves into the ground wherever the lay of the land favored a defensive action. Thus they picked out the hills and ridges and the farther side of wide rivers. When the French and British armies came up to the halted German forces they found



A German Pill-box

The solid concrete machine-gun posts located at commanding places in the German defense systems were often rushed with reckless bravery and beavy losses by our troops.

the latter thoroughly intrenched. If the French and British had then possessed sufficient artillery they could have blasted the Germans out of the trenches then existing and driven them out of France. But the Allies were ill supplied with artillery of the field or light variety, and had practically no heavy artillery for pounding trenches to powder.

wooden posts. To cut the barbed wire meant almost certain death.

Something had to be found to combat the deadly machine gun, which, in the hands of a skilled machine-gunner, was equal to the combined fire of 200 riflemen. Indeed, machine guns have been known to hold up the attack of an entire regiment of 2,000 men by their



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Cutting Barbed Wire

This picture shows the laborious methods first used to get rid of the barbed wire. By the end of 1914 the French had tried various schemes for cutting their way through such obstacles, but the tanks finally solved the problem.

When the Allied troops attacked the German trench-defenders they were mowed down by German machine-gunners. The British and French troops had to charge across the open, only to be checked by the barbed wire which the defenders had strung between stout

leaden spray of 400 to 600 bullets per minute. And not only was it necessary to put the machine gun out of action, but the barbed wire had to be cut so that soldiers might charge across the space between facing trenches, without being delayed.

When the Allied artillery became more numerous and the shell-supply was sufficiently great to permit of the extravagant use of ammunition, the British and French bombarded the Germans with hundreds of guns before each attack. In this manner they succeeded in slaying many Germans and destroying much of the opposing trenches. The barbed wire, too, was somewhat cut up by this heavy shelling, although as likely as not the infantry was certain to come across

large stretches of intact wire.

But the main trouble with this method of attack was that the heavy bombardment had to last for several days in order thoroughly to destroy the barbed wire and enemy works. Imagine giving your enemy several days' warning that you are going to attack him at such and such a place! Yet that is precisely what a prolonged artillery bombardment meant. Germans, being thus warned of a coming attack, in most instances withdrew their men from the front-line trenches and brought up large numbers of reserves just behind the threatened section. When the Allies attacked, they usually advanced beyond the first-, second-, and third-line trenches, or a distance of two or three miles, only to run up against the fresh German reserves. Naturally, with most of the guns having an effective range of five miles, and of necessity placed two miles behind the front-line trenches, the Allied infantry soon got beyond the supporting artillery, and had no protection against German attack except their own weapons.

So another problem was introduced. How could the infantry be provided with artillery that would always be at their disposal? In other words, was it possible to develop accompanying artillery, so to speak?

The first phase of the trench-warfare problem—namely, the cutting of the

barbed wire during an attack—received the attention of French inventors early in the war. By the end of 1914 the French had tried various schemes for cutting barbed wire, among them a gasolene-engine and circular saw mounted on a self-propelled car, and a heavy farm tractor on wheels carrying a powerful set of cutting-jaws and a horizontally mounted circular saw close to the ground. The first type was to be used for sawing the wire, while the second was to cut the wire by means of its cutting-jaws, and the wooden posts were to be sawed off a short distance from the ground. Another scheme was an electrically propelled caterpillar vehicle, which could be steered and controlled from the trenches while it made its way over No Man's Land until it reached the barbed wire. As the little machine picked its way over the rough surface of the battlefield, sliding into shell-holes and forcing its way up old trench elements, it left a cable in its wake which served to supply electric current to the motors, as well as to carry the impulses from the operator back in the trenches, which impulses steered and started or stopped the vehicle. At the opportune moment, or when the vehicle with its deadly charge was in position below the desired stretch of barbed wire, it could be exploded from the operating position in the trenches.

But all such schemes only solved the cutting of the barbed-wire belts. Intense artillery bombardment, among other things, simply tore the battle-field to bits; and the shell-craters and ruined trenches often made the ground impassable for everything but lightly equipped soldiers. Guns and shell-supplies could not be moved over such shell-torn land until rough roads were constructed, and such roads required several days. So if the Allies smashed through the German lines on a front of

several miles, they could only advance their infantry a short distance, because if the infantry went too far the Allied artillery, left far behind, could not throw its shells far enough to protect the thin line out front. Before another advance could be made, the guns, supplies, and other things had to be moved up behind the new advance line, and that meant days and days of delay.

Meanwhile, the Germans were far

unlike an automobilist spreading broken bottles in front of his car, and then stopping long enough to sweep up the broken glass before going ahead.

THAT WONDERFUL AMERICAN TRACTOR

Then a British army engineer, who had been giving this matter of trench warfare considerable thought, recalled the remarkable performances of an



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Infantry and Tanks

The tanks carried guns which served to support the advancing infantry, and protected them from the German machine guns.

from asleep, and usually profited by delivering a powerful counter-attack which regained much of the lost ground, because in falling back before the Allied attack they had simply come closer to their own artillery, while the Allies were farther from theirs. And in warfare the advantage generally rests with the side possessing a preponderance of artillery. So this business of heavy bombardments was unsatisfactory, not only because of the warning it gave, but because of the upheaval of the ground over which the advance was to be made. It was not

American farm tractor near Antwerp, in Belgium, where it climbed all kinds of grades, dipped into holes and chugged out of them with ease, wallowed in mud and forded streams as if it were made for that purpose, and made light of all kinds of traveling. It was a caterpillar type of tractor, with a powerful gasolene-engine for furnishing the motive power. This engineer, then Lieutenant-Colonel Swinton, conceived the idea of a moving fort mounted on such a tractor framework; and it remained for two others, Major Wilson, also of the British

army, and Sir William Tritton, manufacturer of agricultural machinery, to work on the problem of a suitable vehicle, using a well-known type of American caterpillar tractor as a foundation.

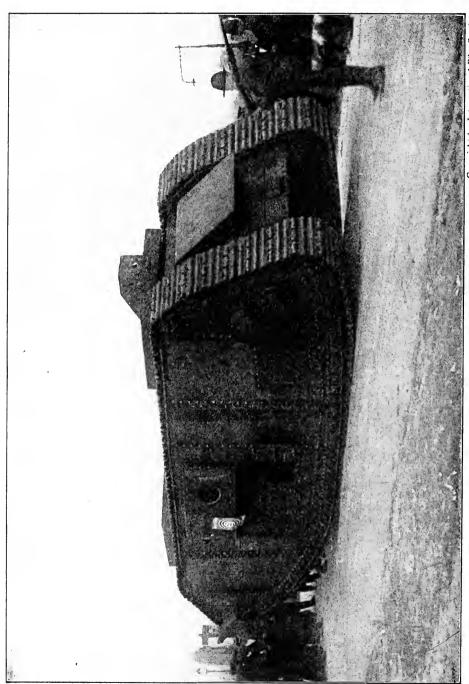
It was not exactly a new idea in warfare, this plan of a moving fort; but the present arrangement was sufficiently new to meet with opposition on the part of army officers. They pointed out that such land battleships—for such they would really be-would be subjected to enemy shell-fire against which they would not be proof. But the idea was too good to be abandoned, and two other officers, Sir E. d'Evncourt and Lieut.-Col. Sir A. G. Stern, set to work to "put it over." The time was not the very best for an idea of this kind, calling for extensive materials and labor and shop facilities. Still, taking what they could get, these men, with the really biggest idea of the war, set to work producing the first British tanks.

Secrecy was absolutely necessary if the tanks were to prove effective. Obviously, if the Germans knew that such vehicles were coming, they could prepare for them by placing numerous guns in the first-line trenches and thus blow the tanks to pieces. So the work of constructing the tanks was enshrouded in the deepest mystery, and the men engaged were sworn to secrecy. In fact, some of the men were isolated from the outer world from the time the work started until the tanks were introduced to the Germans. That these strange weapons might not arouse the curiosity of spies—and there were many spies in Great Britain, just as there were in every other country—it was noised about that they were water-tanks for use in Mesopotamia, and that's how they came to be called tanks. When holes were cut in the big steel box for mounting the guns, the word was given out that they were revolving snow-plows for use in Russia. Each one was labeled, "With Care, to Petrograd."

So it was that the Germans were completely surprised by the first tank attack, as already described. The massive tanks, with their sure-footed caterpillar belts, passed over holes and trenches and barbed-wire belts: even houses and trees were bowled over when they happened in the way. The tanks proved to be the solution of the trench-warfare problem, because they tore great gaps in the barbed-wire belts through which the infantry could advance without delay, they carried guns which served to support the advancing infantry, and they served to protect the infantrymen sheltered about them from the streams of lead poured out by German machine guns. No better proof of the life-saving merits of the tank is necessary than to say that during the battles in which numbers of tanks were engaged they drew the fire that would otherwise have wiped out whole regiments. In two months on the Somme in the fall of 1016 alone, the tanks and there were few of them at the time and the British did not know yet how to use them to the best advantage saved twenty thousand lives.

FRENCH TANKS

At about the time the British set to work on the tank idea, their allies, the French, also started along similar lines. But the French tanks did not appear on the fighting-line until April, 1917, when numbers of them were employed against the Germans on the heights along the Aisne River. However, the French design was faulty; so much so, in fact, that many of the tanks became stalled on the rough battlefield and the German artillerymen, having been warned of impending tank attacks, turned their guns on these motionless targets. Certain it is that the first French attempt



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Uncle Sam's First Tank

In place of wheels, a tank makes use of continuous belts, one on each side of the big steel box. These belts are made up of a large number of links, flexibly connected, which pass over numerous rollers and gear-wheels.

to use tanks was a disappointment; but with characteristic quickness of mind the French authorities set to work revising their plans of attack, while at the same time considering changes in tank design.

WHAT IS A TANK?

What is a tank? How big is it? How many men does it hold? What do they do? Why can the tank make its way over any kind of ground?

All these questions can best be answered at this point, now that we have an idea of how they were developed and to what purpose they served on the battlefields.

The large British tank is shaped somewhat after the fashion of a diamond, with one side resting on the ground and the three other sides in the air. In place of wheels, the tank makes use of continuous belts, one on each side of the big steel box. These belts are made up of a large number of links, flexibly connected, which pass over numerous rollers and gear-wheels mounted on the framework of the tank. then, the way the tank moves forward is by rolling along on the tracks formed by the belts; that is to say, the tank, through the medium of the big gears, pushes itself forward while the belts lav tracks on which it can roll along. That is why this type of vehicle is referred to as a track-laying tractor. And it is the ease with which the flexible belt fits over any kind of ground that makes it possible for the tractor to move along.

A powerful gasolene-engine furnishes the necessary power. At first the British used a 100-horse-power engine, but this proved inadequate. Since then, more powerful engines are used for tanks of large size. The crew for a large tank varies from seven to ten men. The pilot sits up front, and looks out through narrow slits in the steel walls. Back of him come the gunners who

operate the various machine guns and small cannon. Some large British tanks are equipped with machine guns only, some six or more being carried by one machine, while others are equipped with small cannon, 1½- or 3-inch bore. For some purposes the tanks with machine guns are best, while for others the machine-gun tanks are preferable. It all depends on the job ahead of the tanks.

At the rear of the large tank is the power-plant and the engineers. It is vitally important to keep the engine running, for while the tank is under way it is practically safe from shell-fire. Bullets from rifles and machine guns, and hand grenades thrown by trenchdefenders, make no impression on the tough hide of these man-made monsters. But let the tank come to a halt in front of the enemy trenches, and in a few seconds' time a hail of shells terminates the tank's career. To make the tank immune from shell-fire would mean to make it too heavy and cumbersome. And if it were made immune from the three-inch field-guns, its very awkwardness would bring it under the fire of the heavier guns. And if one persisted in making it proof against the heavier guns, which fire shells that penetrate through six inches to a foot of steel, the tank would no longer be able to move because of its excessive weight. is why the tank can only be made proof against rifle and machine-gun bullets; its speed and general ease of turning being depended upon to protect it from enemy shell-fire. Then, too, tanks have been heavily camouflaged, with protective coloration and grass mats.

The French tanks of the earlier design followed the British tanks more or less as far as the general principle was concerned. But the tractor belts of the French tanks were shorter, and the body was practically square. Instead of following the excellent diamond

shape of the British, the French simply took the conventional agricultural tractor and mounted a steel body and equipment thereon. The shortcomings of this improvised construction were only too evident when the tanks attempted to negotiate the broken and uneven ground of the battlefields.

BABY TANKS

The French quickly arrived at the opinion that large tanks would not be

The result of this decision was the development by Louis Renault, one of the foremost automobile engineers of the world, of a small two-man tank capable of considerable speed and possessed of a very fair amount of power per unit of weight. Compared to the big 40-ton tank of the British, the little Renault tank weighs but 6 tons. It will cross trenches up to 5 or 6 feet wide. It will climb grades of I in I, or 100 per cent.—that is to say, it will climb a hill which rises a foot for each horizontal foot. It



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The Renault Tank

The Renault tank is a two-man machine. One man, sitting down with his legs resting straight ahead of him, in the nose of the tank, steers the little land battleship.

successful, although subsequent results with the big British tanks showed that in this respect they were very much mistaken. In many ways, however, their decision was fortunate, in that it led them to turn their attention at once to the construction of a smaller machine.

will hold a speed on a level of about 5 miles per hour.

These Renault tanks, or baby tanks, as they have been called, were built of two kinds—one equipped with a 1½-inch quick-firing cannon, and the other with a machine gun. As in the case of the

big British tanks, they were used for different phases of an attack. In actual fighting the two types were used in about equal ratio. Some of the more recent Renault tanks, equipped with a more powerful engine, have developed speeds of 10 miles an hour across open territory.

The Renault tank is a two-man machine. One man, sitting down with his legs resting straight ahead of him, in the nose of the tank, steers the little land battleship. Back of him, and standing up or sitting on a belt which serves as a seat, is the gunner. The gun is mounted in a revolving turret, which can be turned in any direction necessary. Back of the gunner is a steel wall, and back of that steel wall is the power-plant. The reason for isolating the power-plant is to protect the crew should an enemy shell set the fuel-tank on fire. The engine may be started by a crank which comes through the steel partition.

As in the case of the big British tanks and all other tanks, for that matter, the Renault tank is steered by varying the operation of the caterpillar belts. If the driver wishes to turn to the right, he disengages the right belt from the power-plant and permits the left one to do all the work. That swings the tank around, with the stationary right belt acting as a pivot. Likewise, stopping the left belt and operating the right belt swings the tank to the left. So delicate is this form of steering that a tank can readily turn within its own length.

It was indeed fortunate for the Allies that the French developed the baby tanks while the British stuck to the larger type.

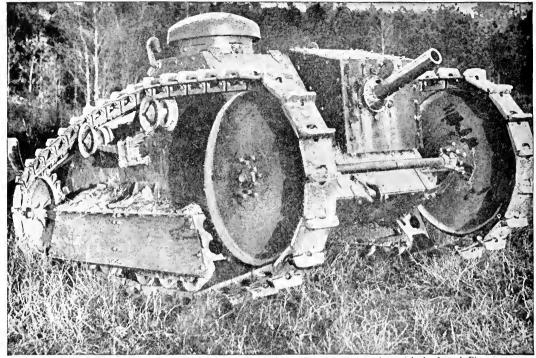
When the American army entered the war both of the types had proved their merits for certain kinds of fighting, so that the Americans decided to use both kinds.

HOW THE TANKS HELPED WIN

In the final fighting which brought the German army to its knees, both types of tanks proved invaluable. The heavy British tanks, for instance, were employed in large numbers in overrunning the powerful Hindenburg line of the Germans. This line, extending across several hundred miles of French territory, consisted of trench after trench and belt after belt of barbed wire. Machine-gun positions were lined with massive layers of concrete; communication trenches were arched over with concrete roofs; dugouts were deep and immune to the heaviest artillery fire; and everything, in short, was considered the last word in defense. The Allied position seemed hopeless, in view of the strength of this German line.

But when the proper time came the British, with hundreds of tanks, attacked the Hindenburg line. It was in the late summer and fall of 1918 that the British tank fleets, backed by British and American troops, began the series of attacks that finally conquered the Hindenburg line. As the tanks went forward, tearing big gaps in the barbed-wire belts, the infantry followed, well protected by the steel flanks of the tanks. Groups of German defenders were routed out of their strongholds by the ponderous land battleships. And as the British and Americans advanced beyond their own artillery, the guns of the tanks offered the necessary support. Truly, it was the accompanying artillery which had been so long sought for.

The big tanks made out very well along the British front, because the fighting there was in the nature of a veritable siege. There was very little movement. The ground was won by the square foot; at least, until the British and American forces carried the Hindenburg line and advanced in the comparatively open country be, and.



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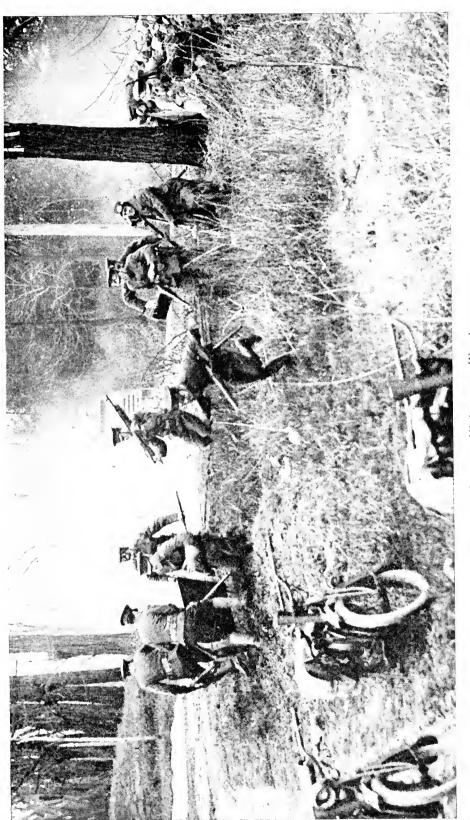
The Ford Baby Tank

Being fast, smaller, and available by the hundreds, the baby tanks were far more suitable in the more or less open warfare in Champagne, along the Aisne, in the Argonne Forest, and about Verdun.

Meanwhile, the final campaign of the French and American armies to the south of the British was more of an open battle. In very short order the Franco-American forces carried the trench works of the Germans in Champagne, along the Aisne, in the Argonne Forest, and about Verdun. And once these trench works were carried, the campaign took on the form of following up the Germans as they fell back, still stubbornly fighting all the way. No sooner did the Germans reach another trenchline than the Americans and French brought up their light baby tanks and began another attack. If artillery was at hand, so much the better; but if there was no artillery, the tanks paved the way. Being fast, smaller, and available by the hundreds, these tanks were far more suitable for this form of warfare in which it was necessary to harass the retreating Germans, who were moving along at a pretty good gait in the closing days of the fighting. Slower tanks would not have been as suitable as the Renault tanks.

"WHIPPETS"

Meanwhile, the British introduced a smaller two-man tank corresponding to the Renault. They gave their small tank the name of "whippet," and this name came to be erroneously applied to all small tanks by the general public. The British "whippet," however, is designed more along the lines of a flat-car, with low caterpillar belts, on which is mounted a steel house containing the crew. The engine is in another and low steel housing just behind.



Infantry Firing on Tanks

The Germans tried anti-tank rifles firing a bullet over one-half inch in diameter. Such bullets did get through the thick hide of the tanks; but, by using a larger number of tanks, the anti-tank gunner became confused and failed to shoot accurately.

HOW THE GERMANS FOUGHT THE TANKS

What did the Germans do to combat the tank? Well, at first they ridiculed the tank idea. But all the while they had a growing fear of this new weapon. The first Allied tank attacks were not overwhelming, for the reason that the crews were still inexperienced in their work, the machines were far from perfected, there were insufficient numbers of tanks, and the proper tactics had not as yet been worked out. But as the Allies perfected and increased their tank fleets the Germans came to have a real respect and awe for these steel monsters.

One German defense against tanks was to gather all the old guns to be found and to ship them to the first-line trenches. Guns are arranged with spiral cuts or grooves inside the barrel, so that the shell passing through the barrel is given a twist which results in the spinning of the shell, somewhat after the fashion of a top. This spinning action keeps it moving with its point straight; otherwise, the shell would "tumble," or turn over and over in its flight, destroying the aim. The grooves in the barrel are known as the rifling, and with worn rifling a gun is inaccurate.

The Germans brought up their old, worn-out guns and installed them in the first-line trenches. These guns with worn rifling constituted their anti-tank artillery, and were intended for firing point-blank at advancing tanks a few hundred yards away. Then again, the Germans planted mines in the path of tanks, but as a general thing the mines were either too small to cause real

damage or they were never planted in the right place. Concrete and steel posts were placed in the path of tanks: but the tanks merely found another way to get by. The same happened when the Germans tried flooding large tracts of land in front of their trenches; the tanks merely attacked elsewhere and came up behind the Germans. Then the Germans tried anti-tank rifles firing a bullet over one-half inch in diameter. Such bullets did get through the thick hide of the tanks; but, by using a larger number of tanks, the anti-tank gunner became confused and failed to shoot accurately. So long as he was confronted by a single tank, he could do his work effectively. When six tanks came at him from all sides. however, he did not take the time to put at least one out of action. Numbers, so it proved, were the greatest factor in making the tanks a success.

Of course the German anti-tank measures were successful to a minor degree. The casualties among tank crews were heavy, in some cases running as high as 50 per cent. But the men never flinched, and the excitement of this kind of fighting brought many volunteers. It was due to the whole-hearted efforts and bravery of these gallant tank crews, both the living and the dead, that thousands upon thousands of Allied lives were saved and the final campaigns of the war resulted in the complete defeat of the German army despite the finest trenches, the most extensive and dense barbed-wire entanglements, and the greatest array of machine guns ever assembled in the history of the world.

GENERAL GETS IN WRONG

WHEN General O'Neill, of Allentown, first went to Spartanburg, South Carolina, his train was three hours late. The negro escort appointed to receive him at the station had been dismissed. The general walked. Presently he was accosted by a sentry.

[&]quot;Who is you?"

[&]quot;General O'Neill."

[&]quot;Well, you cut the buck and go up there to headquarters to beat de debbil and see my captain and explain yosself. We's been waitin' three hours fer you."—Los Angeles Times.

WHEN TANK MET TANK

A Thrilling Battle in the Dark Between an English Tank and a Boche

NOISE does not frighten a soldier on the battlefield, but intense quiet does. Even a big bombardment of "whees," "whizz-bangs," and "coalboxes" cannot get a soldier's nerve like the ghastly silence that sometimes comes just before dawn. This silence was especially real to Arthur Blakesley at Seicheprey, and it was the prelude to an exciting conflict which he described in The Illustrated World: "We had to get four tanks up to the staging-starshell camouflage—just ninety yards behind the Yankee firing-bays. I heard the Leviathan and Mary Ann—the two tanks that preceded us into position start, and though they lumbered out through the darkness at less than three miles an hour I waited in anxious expectation for the German star-shells that would tell us that their approach had been discovered. It seemed as if their exhausts made more racket than all the brass in Sousa's band. When the Vampire—our caterpillar fort—got under way I was certain that the Kaiser, back in Potsdam, must be wakened from his doped dreams of conquest. Of course it all sounds so much worse from the inside of a 'Willie.'

"When we arrived, however, and crawled out to snatch a few minutes' rest before zero hour, you would have thought that the array of ditches and wire that showed faintly in the dim moonlight were furrows on an abandoned farm, for all the signs of human occupancy you could hear or see. It was ominous to me. Shorty Messick named it, though none of us agreed with him at the time. 'I'll bet,' said he, 'the Boches are going to start a push, too!'

"That his guess was absolutely correct mattered tremendously, inasmuch as it gave opportunity for one of the strangest duels that ever occurred on the Western front—a battle of tank against tank, in which horse-power counted as much as the projectiles fired. These steel-clad giants had met before, and doubtless have met since, but never at grips as at Seicheprey, to the best of my knowledge. As I was firing a sixpounder for the *Vampire*, I saw all that occurred. And what a duel it was!

"The battle must have been something of a mutual surprise. I know that our officers did not anticipate the Boche push, and from results I am certain that they did not expect us. Promptly at 4.45 A.M. their batteries started. Our zero was to have been five o'clock, but when the German guns began their concert a hurry-up order went around, and we were off.

"Up we tilted over the parapet, and banged down with our nose in the mud. Neither side was sending up flares, because of their own attackers, so it was dark as midnight in Africa. The flashes of exploding H. E. in the trenches we had quitted, and in the Hun ditches far ahead, punctuated by the comma-like flicker of rifle and machine-gun fire, were the only lights to guide our driver. As a result we floundered straight into our own wire.

"A way had been prepared, and this we had to find. Out we backed, the rusty barbs scratching on our steel sides. Two more futile attempts were made before the gate was located. We had wasted time and were behind schedule. Our driver threw the *Vampire* into high

gear, and at risk of an accident that would put us *hors de combat* for the night we reeled along into shell-craters and soft mud, but always floundering out somehow.

"Now I could locate the line of German trenches, and filtering through the wire in little groups came the Germans. They were not visible as so many shapes to me, but they fired as they came.

"Suddenly there came a terrific shock, throwing me forward against my gun, and the Vampire stopped, as though she had encountered a stone wall. 'Are we hit?' I yelled in futile question; the din was so terrific from our engine that I scarcely could hear my own words. Twice our driver raced the engine. Twice he let in the clutch suddenly, thinking to surmount the obstacle in our path. Each time we stopped dead.

"While I was puzzling over this there are no cliffs in that particular sector of No Man's Land against which we could have run—a sudden glare shone in my eyes. The obstacle, whatever it was, carried an enormous searchlight.

"A half-second later our own light went on, and then to my horror I beheld our antagonist, one of the gigantic Ger-

man tanks, nose on against us!

"I think that both of us were completely stunned for several seconds. Then I saw the gun in their top turret depress and fire. An explosive bullet burst just behind the crew of the secondary gears! I awoke with a start. The big enemy tank carried one, at least, of the anti-tank rifles, firing high-power exploding bullets made to pierce armor.

"I whirled the vertical lever, depressed my gun as far as possible, and let go. The shot caromed off their roof, exploding, but doing not a particle of damage. Again and again I tried, but with no more success. The truth began to dawn upon me; mine was the only gun we carried that could do execution against a German tank. And my gun could not be depressed sufficiently to register a square hit.

"The only possibility of success lay in drawing off far enough so that we could get them in the side. I jumped down and ran forward. The driver was slouched in his seat, dead! An explosive bullet had finished him. I jerked him out of the seat and grabbed Lieutenant M—, our commander. I had no intention of standing on ceremony. I pulled him over into the driver's seat, and yelled the terrible story in his ear.

"He understood, and threw the Vampire into reverse. As we backed away, however, and I went back to my gun, the Hun tank gave us no chance. They followed us, keeping out of range.

"All would have been over for us had not Lieutenant M—— been seized with a real inspiration. As we backed over a shell-crater he stopped. The second the nose of the Boche came up from the crater after us he threw the *Vampire* into low gear forward. Our angular nose slid straight under the nose of the Hun tank, forcing her into the air. She was in our range; we were immune from her fire!

"Like a madman I gave it to her through her floor. As shell after shell tore into her she tried to back away, but always Lieutenant M—— advanced, forcing her up all of the time. Then she switched tactics and tried to slither over us, but we stopped that by reversing. All the time my six-pounder was knocking her to bits.

"Suddenly the Hun tank stopped. A tremendous explosion tore her sides out, shaking us as if an earthquake had happened. Then came the telltale flare of her petrol. I knew our battle was

won."

THE CHARGE OF THE TANK BRIGADE

(Shade of Tennyson, forgive!)

Half a league, half a league, Half a league onward, Move like the scythe of Death, Tanks by the hundred. Boche bullets harmless glide Down from their metal hide, While from that steely hell Showers of shot and shell Volley'd and thunder'd.

Was there a Boche that stayed To see how they were made? Not when each Fritzie felt
His hours were number'd.
Theirs not to peek and pry,
Theirs not to wonder why,
Theirs but to sprint or die.
Straight to Berlin they fly,
Huns by the hundred.

Tanks to the right of them,
Tanks to the left of them,
Tanks back and front surround
Fritz, Hans, and Herman.
Rolling the wires straight,
Onward they navigate,
Crushing each creature that
Smells like a German.

What is that yellow streak
In the dim distance? Speak!
Is it a circus freak?
Has nature blundered?
Hush! 'Tis the Kaiser's kin
Trying to follow in
Vain his retreating chin.
Small blame you wondered.

Honor the Tank Brigade! Honor the fleet that made Every last Boche afraid Prussia was sunder'd. End all this sin with them, Help us to win with them, On to Berlin with them! War Lord, who blunder'd!

-VILDA SAUVAGE OWENS, in The New York Times.



The Smiling Victor of the Marne

"Papa Joffre" was not a politician, and the French politicians rather crowded him into the background. But on July 14, 1919, in celebrating their victory, the French people showed unmistakably that the Hero of the Marne held a first place in the hearts of his countrymen.

A MODERN TROJAN HORSE

A Young Australian's Sensations on a Tank Cruise

PERHAPS a tank would not have been a great surprise to the Trojans who had seen the great wooden horse of the Greeks disgorging armed men inside the city gates, but it certainly was a surprise to the Germans, as well as a decided novelty in the way of locomotion to some of the soldiers who fought in it.

The Manchester Guardian has published a part of a diary kept by a young Australian soldier who served with one of these new terrors of war. Here is his story of his experiences in the Juggernaut:

"Monday.—Out for first time. Strange sensation. Worse than being in a submarine. At first unable to see anything, but imagined a lot. Bullets began to rain like hailstones on a galvanized roof at first, then like a series of hammerblows. We passed through it all unscathed. Suddenly we gave a terrible lurch. I thought we were booked through. Lookout said we were astride an enemy trench. 'Give them h——,' was the order. We gave them it. Our guns raked and swept trenches right and left.

"Machine guns brought forward. Started vicious rattle on our 'hide.' Not the least impression was made. Shells began to burst. We moved on and cut their ranks to ribbons with our fire. They ran like men possessed. Officer tried to rally them. They awaited our coming for a while. As soon as our guns began to spit at them they were off once more. Infantry rounded them up, and survivors surrendered. Very curious about us. Stood open-mouthed and wide-eyed, watching, but weren't much the wiser.

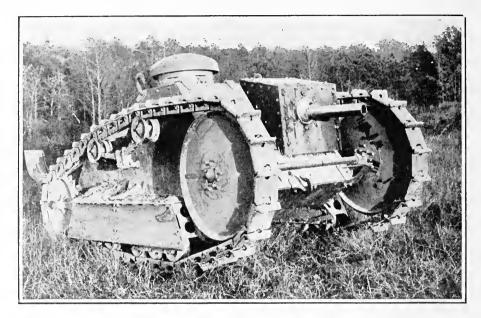
"Experience was not altogether pleasant at first. 'Tank'-sickness is as bad as seasickness until you get used to them.

"Tuesday.—Off for another cruise. Peppering begun at once. Thought the old thing was going to be drowned in shower of bullets. Things quieted down quickly. Silly blighters thought they could rush the tank like they would a fort. Dashed up from all sides. We fired at them point-blank. Devilish plucky chaps some of them, for all their madness. The survivors had another We spat at them venomously. More of them went down. The blessed old tub gave a sudden jerk. God in heaven, thought I, it's good-by to earth; but it wasn't. The rain of bullets resumed. It was like as if hundreds of rivets were being hammered into the hide of the tank. We rushed through. Soon the music had charms, and we got to like the regular rhythm of it.

"Suddenly a jolt, and our hearts jolted in our mouths in sympathy. Nothing doing in the mishap line. Only some unwonted obstacle. Heavier 'strumming' on our keyboard outside, and more regu-Machine guns at it now. Straddled on as though we liked it. A tremendous thud. The whole outfit seemed done for. Nearly jumped out of my skin. Looked at one another and wondered what it was. Still a roof over our heads, thank God! Thought we had got on the rocky road to Dublin, but it was only another trench. Our 'spitting devils' opened fire and swept the trench clear of the enemy right and

"Wednesday.- Early start. Rough-

est voyage yet. Waves of fire seemed to break over us. Tremendous crash. Then another, and several others at intervals. Silence for a time. Party came to meet us outside the village. Then tried silly boarding tactics. We laughed. Our guns answered theirs. Tank reception committee dispersed in a cloud of smoke and flame; no trailing clouds of glory. Fat old gentleman only



A Baby Three-Ton Tank

Very stout old gentleman in front. Thought it was the mayor and village big-pots to give us a civic welcome. Mistaken. They meant to give warm reception, but not as we understood the word. Let fly with machine guns.

visible member of deputation. Stood open-mouthed. Purple with rage. Tank bore down. Old gent started to run. Funnier than a sack-race. Old gent flung himself to earth with many signs of surrender."

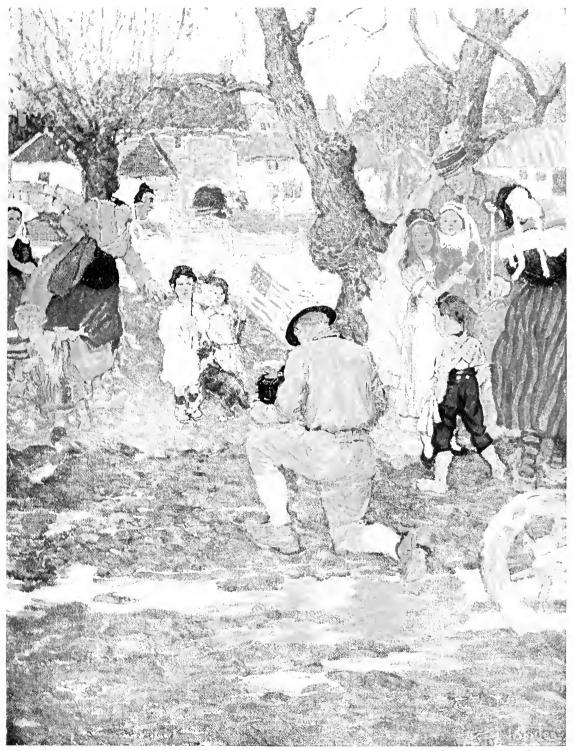
LULLABY FOR A BABY TANK

(Apologies to Lord Tennyson)

SQUAT and low, squat and low,
Tank of the Western Front,
Feared by foe, brave Gouraud
Welcomes thy features blunt.
Over the rugged trenches go,
Crawling from Soissons or Belleau,
Trundle foreshortened runt.
Creep, my little one, over each brittle Hun,
creep.

Creep and rest, creep and rest,
Rest on the Teuton's toes;
Sleep, sleep, on the France we'll keep,
Victory bring thee repose.
Lie in thy cradle—a crater deprest
Deep as German hopes in the west,
Sunk in their August woes.
Sleep, my gritty one, wee, unpretty one,
sleep.

-H. T. CRAVEN, in The Philadelphia Public Ledger.



Best of Friends

'ainting by Henry J. Souler



BIG GUNS AND SUPER-GUNS

The Heavy Hitters of the Great War

By C. L. Edholm

N a quiet afternoon in March, 1918, Paris, the city of gaiety and laughter, had turned its thoughts toward sacred things, for it was Good Friday, the most solemn day in the calendar of the Church.

So the wives and mothers of the French soldiers, and the little children, and the men who were disabled or too old to fight for their country, were gathered in the churches that afternoon. Many a prayer rose to Heaven for the safe return of loved ones at the front. The heavy shadows in the church of St.-Gervais were relieved by the glimmer of candles. The silence was broken only by the intoned prayers of the priest and the murmured responses of the congregation.

In the midst of war these people had gathered for a few precious minutes of

quiet and worship.

Then a terrible thing happened. Straight from the sky flew a shrieking shell. It struck the roof of the church and exploded as it crashed down among the kneeling people. In less than a second the sacred place had become a slaughter-house. Heavy stones from the roof and walls fell upon the screaming women. The air was filled with mortar dust and stifling gases. The dead were flung about everywhere upon the floor. Seventy-five had been killed outright, and of these victims fifty-four were women. Ninety more people had been crushed or broken so that some of them died and others were crippled for life.

This was the latest crime that Germany had committed in the name of

war. Though the killing of women and children and old men could not held the Kaiser win a single battle or bring his army one step nearer to Paris, he is reported to have sent a telegram to the manager of the Krupp works, with congratulations on the success of the attack.

THE MYSTERY GUN

The mystery gun that fired 9½-inch shells upon Paris was the riddle of the Great War. It had begun firing without warning on March 23d. Then, regular as clockwork, shells dropped every 20 minutes through the following days.

No one knew at first where they came from. The country within ordinary range of the capital was held by the French troops. Some wild guesses were made by the inhabitants. Some thought the shells might have dropped from a German airplane, but the alert French air scouts reported that there were no enemies flying over Paris.

Other people whispered that spies were hidden within the French lines and that they had turned a gun upon the city, but this rumor was false, of course. Paris was excited, but not frightened.

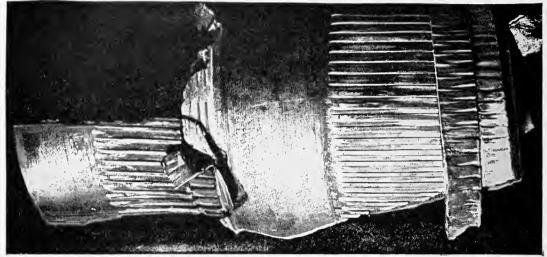
For some time the attacks continued: a shell every 20 minutes through the day, always near the same point, sometimes killing a few people and damaging their homes. But the French were more furious than frightened by this outrage, and more anxious to punish the enemy than to flee from the city. Most of all, they were curious to know

where this unseen and distant foe was hidden.

Finally, word was spread that air scouts had found the super-gun deep in the Forest of St.-Gobain, a distance of 73 miles from Paris and just within the German lines.

This news seemed unbelievable, be-

of this super-gun rose in a long, curving flight to a height of 126,720 feet, or about 24 miles. This is higher than the five highest mountains in the world together. If Mt. Everest, Mt. Aconcagua, Mt. McKinley, Popocatepetl and Mont Blanc were piled one on top of the other, the shell that hit the



From Leslie's Weekly

A Fragment from a Shell of the Famous Big Gun

The mystery gun that fired 9½-inch shells upon Paris began firing without warning on March 23, 1918. It was fired from a point over 70 miles away.

cause no gun had ever been known to shoot that far or anywhere near so far. But it was true. The Germans had produced something new in artillery: a gun with a range so great that a fairly good walker would require about three days to make the distance covered by its shell in three minutes.

How could it be possible to build a gun that would shoot so far? Artillery experts explained this super-gun, but their statements were almost too amazing to believe. It is known that in order to carry so far, a shell must be aimed upward at an angle, just as when you throw a ball as far as possible you throw it high in the air and not straight ahead.

So the scientists claim that the shell

church in Paris would have flown miles above the topmost peak.

From fragments of the shells picked up in the city, it was found that its size had been about 91/2 inches in diameter, and its weight about 420 pounds. As modern shells go, this is not very large, but it is believed that a gun of much larger caliber was used, probably one designed to carry a shell of 15-inch diameter. This might have been fitted with an inner lining of steel to reduce it to the 91/2-inch diameter of the shell, leaving at the rear of the gun the huge powder-chamber. With such an excessive charge of high-power explosive, it was calculated that the shell could be driven from the muzzle at the speed of 6,200 feet a second.

By elevating the gun so that the projectile would rise 24 miles from the earth, the shell would travel with less resistance from the air. This is because the air is very light and thin at such a great height, and a shell can fly through it without being slowed down. It is easy to understand how air pressure can check the speed of a shell; just try riding fast on your bicycle and feel how the air blows back your shirt and beats against your face, even on a calm day. The faster you go, the stronger the "wind" on your face, so you can imagine what tremendous pressure there is against an object that flies 73 miles in 3 minutes.

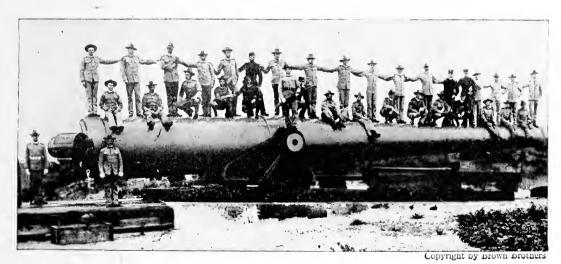
The most remarkable fact about the super-gun was that it had so little value in warfare. Several reasons for this are given, the most important being that the gunner cannot tell where he is hitting. The distance is so great that it is not possible to signal back to the marksman where his shells fall. Of

SHELLING THE SUPER-GUNS

So while the long-range gun made a great sensation, it was not immediately copied by the Allies, who merely strove to put it out of action.

French aviators located the battery and found it was of three guns. They found it in spite of the fact that it was hidden in a forest and screened by smoke. Even though when a supergun was fired a number of other big guns in that area were fired at the same moment, the clever air scouts found it out. Presently a battery of French guns began shelling the monsters from a distance of 10 miles. Shells weighing a half-ton and filled with high explosives were dropped all about the battery. The ground was torn up around it, and after a while an aviator succeeded in taking a photograph showing that one of the long-range guns had been hit.

This product of the Krupp works was said to be about 96 feet long, and so



One of the Naval Guns

course, there is no use in shooting blindly, and it is not worth building super-guns to drop shells into a city as big as Paris on the chance of hitting some military headquarters or arsenal.

heavy and unwieldy that it was mounted on a fixed base and could not be shifted. That explained why the shells that reached Paris all fell within a small section, about a mile square, and hit only such peaceful targets as churches and infant-asylums.

Finally the attacks on Paris ceased, and when the ground the super-guns had occupied was taken over, they had been removed.

Like the submarine and the Zeppelin, this weapon of frightfulness failed to secure what the Germans had desired. The Allies could not be scared into surrender. The Kaiser had merely produced another sensational failure.

Much larger guns were used by both sides in the Great War, though they did not carry nearly so far. The French are credited with the biggest of all, a howitzer carried on a railroad flat-car of steel, which threw a shell of a diameter of more than 20 inches, or 520 millimeters. This was the answer of France to the German and Austrian howitzers and mortars of 420 and 300 millimeters, which were the surprise of the early days of the war.

These siege-guns are not designed to throw shells an excessive distance, but to destroy forts by heavy hitting. This is done by dropping a huge quantity of high-power explosive within the walls of concrete and steel that make a modern stronghold. The shell must be so heavy that it will smash through roofing of steel plate, and the fuse must be timed so that the explosion will take place inside the walls. No structure can stand up against such fire. French howitzer, the 20-inch Creusot, it is reported, destroyed Fort Malmaison with a single shell, crumbling the massive walls into rubbish-heaps in a fraction of a second.

MOBILE BIG GUNS

One of the great feats of the war was to mount such heavy artillery so that it could be carried from place to place. It had been believed that such big guns could be used only on fixed foundations, such as forts and the turrets of battleships, but the Germans and Austrians appeared early in the conflict with mortars drawn by gas-tractors. They were monstrous-looking cars with wheels that carried wide, flat plates to prevent them from sinking into the ground. Then it was found that railroad-cars could be built to withstand the shock of the discharge and the recoil, or kick, of the guns, and they were used a great deal.

The advantage of a big gun that can be moved readily is that the strongest fort is no longer safe from attack. No matter how thick its walls or how deep its earthworks, it can be hammered by the tons and tons of shells until it goes to pieces. For the position of a fort is known to the attacking force. They can train their guns upon it accurately, but the gunners in the fort have to learn the location of the portable guns, which can be brought in the night to a new position. This puts the fort at a great disadvantage against siege-guns.

This explains why the Germans were so successful in forcing their way through Belgium. Forts such as Liège, Namur, and Antwerp, that were thought to be too strong for any successful assault, were shattered and battered and forced to surrender by the terrible Skoda mor-Cupolas made of massive iron and steel, and sunk into the ground so that only their round tops were exposed, were destroyed in short order. The mortars and howitzers are the type of gun that shoot high in the air and allow the shell to drop upon the target. top is the weakest part of the modern fort, for there the plates of steel are thinner than the side walls, which are further protected by banks of earth. So a shell dropping upon the top of a cupola can do the most damage.

That is why this type of gun is used against forts instead of the sort that shoots straight ahead, or, as it is called, by direct fire. The howitzer is most



The Explosion of German Shrapnel

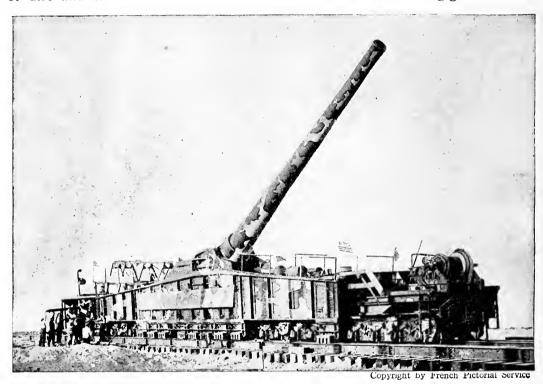
However skilfully a soldier may try to avoid an explosion of shrapnel, it is seldom he escapes without wounds which are more or less serious.

useful against trenches and dugouts for the same reason. The shell that falls from above will bury itself deep in the earth or drive through the roof of the dugout. The fuse that explodes it is set so that it will not go off until it has reached the right depth, and then tons of dirt and timbers and concrete are

HEAVY SHELL-FIRE

This is not strange when the great number of shells used in a modern battle is considered. In a certain attack, four tons of shells were hurled upon every yard of the German front by the French.

The true aim of the big guns is amaz-



America's Most Powerful Mobile Artillery

When a great gun can be run on tracks, that may make it equal to a hundred or a thousand guns, because it can be moved to as many places as the track reaches. Mobile artillery is artillery that can be moved about like an automobile or train.

thrown into the air with the force of the explosion.

All that is left of that part of the defense is a round, deep hole called a shell-crater. Parts of the Western front were shelled until there remained just one crater after another, with not a square foot untouched. These areas look like the pictures of the moon as seen through a telescope, a dead world, pitted with the craters of extinct volcanoes.

ing, for, when the range is known, the elevation of the gun can be figured out so accurately that an object invisible to the gunner will be squarely hit. At the siege of Antwerp the steel cupola of a fort was struck by a shell from a Skoda mortar that was seven and a half miles away. The range and aim were found from the large-scale maps used by officers. This shows the danger of a fixed position and the value of portable guns. Of course, the latter, though

carefully hidden away, are searched for by the enemy. Air scouts and gunners play a constant game of hide-and-seek, and the rival planes fight fierce duels in the air for this reason. To keep the foe from learning where your batteries are concealed is one of the chief duties of the fighting-plane.

Discovery is made as hard as possible by painting the guns in streaks and spots that look like masses of foliage and shadows. This is called camouflage, and is an art learned from animals and birds. The striping of the tiger is an example of that trick, for the black and yellow bars are not easily seen in the canebrakes where the tiger prowls, as the streaks of yellow sunlight and dark shadow lines blend with the markings of the tiger-skin.

HUNTING HIDDEN GUNS

That is why the guns and their carriages are painted in patches of bright color that imitate their surroundings. They are usually hidden in the woods, so brush and boughs are attached to them as a further screen from the enemy flying overhead with keen eyes and a ready camera. Another trick is to place a battery of dummy guns made of wood where the aviators will see them with little trouble, and thus draw the enemy fire from the real battery.

When the air scouts locate concealed guns by the flash of their discharge, they signal back the position to their own gunners, and in a few minutes the place is hot with shells. If possible, the airman will remain overhead and report the results of the shots; whether the shells are falling too far or too near; whether they are dropping to the right or the left of the battery. That is one of the best ways of getting the range just right, by correcting the aim from shot to shot until the true range is found. Then the battery is done for

unless it can move or silence the enemy guns.

Of course, the air scout is not allowed to do such work without a stiff fight, and that is why the planes must be numerous and prepared for combat when they support artillery. Signals are sent to the gunners from airplanes by many devices. Wireless is used, and so are colored panels that are spread to be seen through the officer's field-glass. Objects are dropped from the planes over enemy batteries, to drift slowly earthward, and these can be seen by observers trying to find the range. Lights are dropped by the airmen when directly overhead, and combinations are worked as a code so that a certain message can be sent back.

In getting the range there is no guesswork. It is all worked out by mathematics, and the laws of the triangle are the basis of range-finding. For example, if two observers are stationed at a given distance apart with their rangefinding instruments trained on the plane as it signals, each observer sees it at a certain angle from the line between the observation posts. That is all the information that is needed: with one base line of a definite length, and two angles known, the distance to the apex of the triangle is easily found. Sometimes a single observer gets the range by using an instrument with two sights a few feet apart, but the principle is the same.

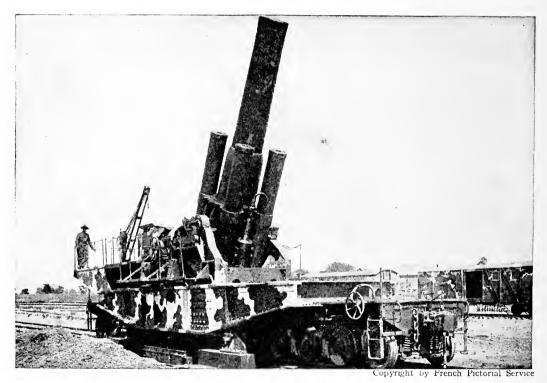
The observers are not likely to be at the battery they report to, but may be at any distance from which they can telephone to the officer in command of the guns. They may be in a captive balloon, with a telephone wire running down the cable te the ground, or hidden in a tree, or in some position far in advance of the battery, a shell-hole or other hiding-place from which they can see without being seen.

When a battery has been discovered

and the shelling gets too hot, or when a charge has succeeded and the guns are in danger of capture, then the advantage of the mobile artillery is proven. The guns may be withdrawn hastily and saved by a quick retreat. The big Skoda mortars are carried in three sections which can be taken apart and loaded on their motor tractors in about half an hour. The gun is lifted from its carriage to a truck; the mount goes on a second, while the steel foundation travels on a third tractor. The battery can retreat at a speed of 12 miles an hour, and, when a new position is found,

While they are designed for use against forts and batteries, they are sometimes brought against bodies of troops, after the manner of light field-guns, and then the results may be terrible. A single shell bursting upon troops in close formation in Russian Poland destroyed a battery of artillery and an entire battalion of infantry. The men who were not blown to pieces by the explosion were killed by the shock or strangled by the gases caused by the high explosive.

The recoil of such a big gun would wreck the carriage in short order, or

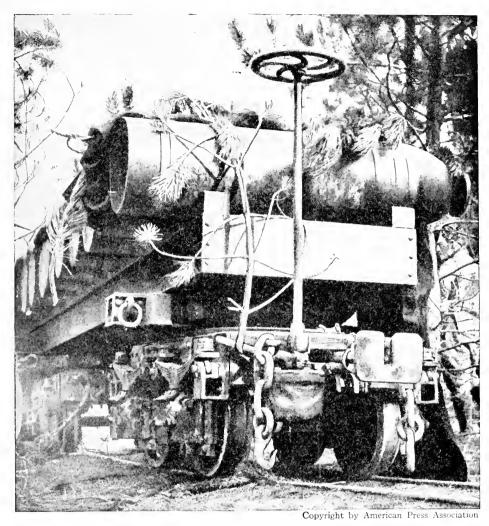


A Surprise for Germany

Germany started in the war well prepared and with the most modern equipment, so that she seemed hardly to reckon that her foe, with a little time, might equal her equipment in nearly every way.

it is possible to remount it ready for action in 24 minutes, and begin firing shells at the rate of one a minute. These shells weigh 858 pounds each, or about as much as five men together.

throw the piece off its mount, if it were not taken up by a special device. When shooting an ordinary shotgun, you have felt a kick that threw back your shoulder, and even a revolver has enough



Big Shells for the Somme Front

This picture gives an idea of how car-load after car-load of shells and other ammunition had to be kept moving up to the battle front.

recoil to jerk your hand up, unless you are trained to resist it. If such a light charge of powder causes such a recoil, you may imagine the tremendous kick of a shell fired by a charge of more than 100 pounds of high explosive. This is taken up in big guns by a liquid brake or by springs, and brought back into firing position by air pressure.

The guns are built up of layer upon layer of tough steel designed to stand the intense heat of an explosion without

burning up. The wear caused by this terrific heat and strain sooner or later destroys the little grooves that run in a spiral within the bore and are known as rifling. When the rifling is worn down, the shell does not fly so accurately, as these grooves give a twisting motion to the shell that keep it head on and true to its course. When the rifling is burned out, the gun has to be sent for repairs to a plant where the inner layer of steel is removed. Another lining

replaces it and the gun is ready to go to the front once more. Meanwhile, the recoil apparatus has been given a thorough overhauling and has been tested for accuracy.

The number of shots that can be fired before a gun burns out depends largely upon its size. A field-piece with a bore of about 3 inches may be good for 5,000 or 6,000 shots, a 6-inch gun may need attention after 2,500 rounds; but when the 12-inch-caliber gun is fired, the heat is so intense from the huge powder charge that 250 rounds may be the limit. It is said that some of the biggest guns, firing a shell of about 17 inches, are good for only 25 accurate shots; after that they may be used for as many more that cannot be as squarely placed on the target, and then they are ready for the gun-hospital.

BIG GUNS AFLOAT

While the big guns of the Allied navies did not get into action on the scale that was expected, the fact that they were there in readiness for battle was a most decisive feature of the war. The German fleet, bottled up in the Kiel Canal, made only one vigorous attempt to get out, for the work of the scattered raiders was not big enough to count. But in the battle of Jutland the Germans learned their lesson, and after returning to their safe retreat the Kaiser's war-vessels came out again only to surrender after the armistice was signed. Finally they met their end, sunk by their own men beneath the waters of Scapa Flow.

It was the big guns of the British navy that humbled the enemy in its greatest pride, the fleet which the Kaiser had dreamed of building up until it became a rival of England's

sea power.

The most heavily armed of the British battleships are those of the Oueen Elizabeth type, carrying eight guns of 15-inch caliber. They have sixteen 6inch guns as well, together with a number of anti-aircraft guns and 12-pounders, and four torpedo-tubes. The eight big guns are in heavily armored turrets, two guns to each turret, and four are placed at each end of the battleship.

The turrets might be called small forts, composed of heavy steel walls and roof, and made to turn with their twin guns in any direction. Powerful machinery operates the turrets, raises and lowers the guns, and handles the great shells, weighing 1,920 pounds. This type of naval gun is 50 feet long and has a weight of 85 tons, yet it is so delicately balanced and mounted that it may be moved by wheels and levers as easily as you point your finger. Such a gun carries a charge of 380 pounds of a high explosive called cordite, which drives the huge mass of the steel shell at a speed of 2,360 feet per second. The force back of this shell as it leaves the muzzle is equal to the pressure of 83,500 tons.

The energy behind a shell has to be tremendous, for the battleship of to-day is covered with plates of the hardest and toughest steel that it is possible to make. Vessels of this class have an armor 13 inches thick on sides and turrets, and it takes a hard-hitting projectile to pierce

it.

The limits of big guns in the navy have not been reached yet, for the latest additions to our own fleet and the British fleet carry giants of still larger caliber. Unlike the big guns used on land for destroying forts and trenches by high angle fire, the naval guns operate by direct fire, a straight-ahead shot at a visible mark, in which the shell does not make a high, curving flight, but travels in a comparatively straight course. Great range is not so necessary as on land, for the battleship is too small a target to be found at an excessive distance, and naval battles are fought with



Target Practice

The energy behind a naval shell had to be tremendous, for the battleships used in the Great War were covered with plates of the hardest and toughest steel.

the ships but a few miles apart. But hard hitting and accuracy are the main points of value for the big guns afloat.

It seems an open question whether the contest between the armor-builder and the gun-maker will ever be decided; whether a gun can be made to hit so hard that no armor will resist it, or whether a shield of steel can be made so hard and tough and thick that no missile will penetrate it. Every war brings its surprise to both sides in this game of attack and defense.

MAKING POWDER FOR THE BIG GUNS

The explosive used for the big guns is not like the black powder we are all familiar with, for in the first place it is not a powder at all, but little yellowish cakes or cylinders with a number of small holes running lengthwise through them. Black powder, as we know from Fourth-of-July experiments, flashes out with a sudden puff of flame and smoke, but the modern powder is comparatively slow-burning and smokeless.

It is made of cotton, and there is a common saying that every time a big gun is discharged a bale of cotton goes up in flame. Guncotton was discovered many years ago, in 1832, but for a long time its action was so uncertain and violent that it was unsafe to use it; more dangerous to the user than the enemy, it was thought. As scientists learned more about it, the danger lessened, though there have been enough explosions in munitions-plants during the war to prove that it is nothing to trifle with.

The value of smokeless powder, aside from its great force, is that its burning-speed can be regulated with precision. A gun may be fifty feet or more in length, and it is desirable that the powder driving the shell through the bore should keep burning and creating more power until the projectile leaves the gun.

If the entire charge exploded in the same instant, the strain on the gun would be far greater and more dangerous, so certain elements go into the powder to reduce the suddenness of the explosion. The size and shape of the grains affect the burning-speed, and so does the number of the little holes that run through each grain.

These details are all studied by the experts, so that guns of a certain caliber and length are supplied with just the right kind of powder to get the best results.

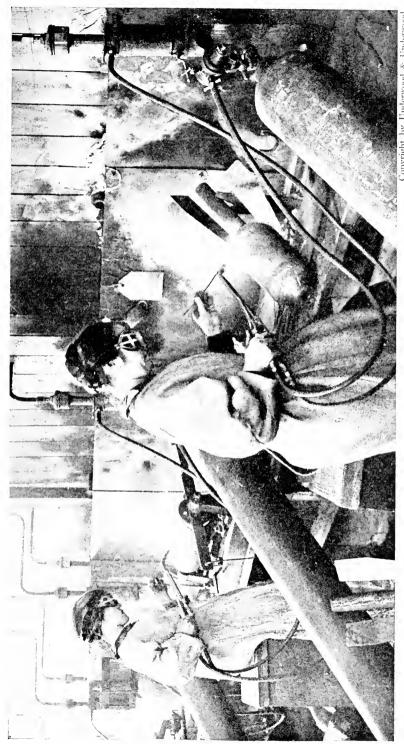
In turning a bale of harmless cotton into powder for the big guns, it is first washed in an alkaline bath and afterward dried in great heat. It is then soaked in a mixture of nitric and sulphuric acid. After the cotton has absorbed enough nitric acid, in the course of half an hour, it is washed out thoroughly in running water and then dried by a mechanical wringer. It is now a very dangerous character, for it has become guncotton.

The next step is to remove the acid, and this is done by boiling and boiling for two days, and then it is worked into a pulp for about thirty hours and the

water is changed often.

The moisture is then pressed out of the pulpy mass, alcohol is added, and then ether, after which the mixture is kneaded like dough and formed into fifty-pound cakes. These are driven through a colander-like device that turns it out as long, snaky ropes, which are pressed together in a mass and sent under high pressure through a machine that gives it the final shape. It comes out as small cylinders with little holes running through them, and is then ready for the long period of drying before it is used.

Every detail has to be handled with the greatest care, and the mixtures of chemicals must be perfect, as a very slight difference would result in failure, or perhaps cause a terrific explosion.



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Making the Aerial Messengers of Death

Women in a French factory attaching the wings on bombs that are dropped from airplanes. The wings steady the bombs in their falling downward. These women are using the oxy-acctylene process of welding, in which a blast of oxygen-gas mingles with the They wear goggles to protect their acetylene-gas in the torch and creates a heat that melts steel as tallow melts in an ordinary flame, eyes from the glare and from flying sparks.

DISCOVERY OF EXPLOSIVES

The careful formulæ for making modern high explosives are a strange contrast to the directions left by Roger Bacon, the friar, who is credited with

the discovery of gunpowder.

Living in the age of superstition, during the thirteenth century, he feared to be punished by death as a master of the black art, a magician, if he should tell his secret to the world. So he buried his directions for combining charcoal, sulphur, and saltpeter in a mass of writings about totally different subjects. Only those readers who had the key to his riddle could guess what it was all about. His discovery of the explosive is believed to have been accidental. The little room in which he was mixing untried substances was wrecked one day, with a loud noise and much smoke, and the badly singed friar found he had hit upon a combination of unguessed power.

The first cannon was invented in the following century, and the first picture of one, dated 1327, shows a pot-shaped gun mounted on four legs like a sawhorse. It is loaded with a clumsy dart that sticks out of its muzzle, and is aimed at the gate of a city, which it probably failed to dent. This ancient gun was exploded by touching the charge with a red-hot iron, and a similar method was in use for several hundred years, for the art of gunnery developed slowly. It was not until 1800 that fulminate of

mercury was discovered, which made percussion-caps possible, and the guns fit for using such caps date from 1842.

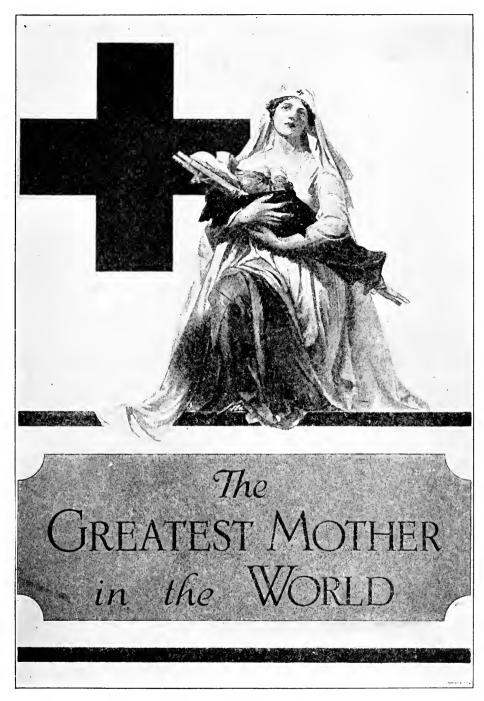
The projectiles developed gradually toward the modern shell. Instead of darts shot from the vaselike mouth of a cannon, stone balls came into use, and these were followed by iron shot, often brought to red heat before loading. Very heavy balls could not be used, as the early cannon often exploded and the gunners were in more danger than the enemy. The cannon-balls were round, for it was not until recent times that the rifling process made the present bullet shape practical. Explosive shells were not used with much effect until 1588, and they were crude and uncertain. Cannon of wood and of leather were tried out, which indicates that the metals used for gun-casting were not very reliable.

The history of the present big guns is all recent. It was not until our own times that shells weighing hundreds of pounds could be hurled for miles through the air and caused to explode upon a target that the marksman could not see. Not before the recent war could a gunner send up a messenger on wings, to flash him word through wireless waves that his shot had found the mark or missed it. If the inventor of gunpowder could have dreamed of such a feat, while mixing charcoal, sulphur, and saltpeter in his monastery cell, he would have thought it black magic indeed.

THE MISSOURI MULE ABROAD

A LONG and patient but vain effort on the part of a khaki-clad driver to induce a mule, drawing what appeared to be a load of laundry, through the gateway of a local hospital afforded considerable amusement to the boys in blue who were watching the proceedings. The mule would do anything but pass through the gateway.

"Want any 'clp, chum?" shouted one of the boys in blue to the driver, as he rested a moment. "No," replied the driver, "but I'd like to know how Noah got two of these blighters into the Ark!"—Tit-Bits.



The Most Popular Red Cross Poster

Why do you think that this poster was liked so much? It is because thousands of children were left without mothers during the war, and it was then that the Red Cross had to step in and be a mother to them all.

THE SMALLEST FIGHTERS

The Battle Against Micro-Organisms Which Was One of the Great Triumphs of the War

By Elizabeth Burr Thelberg, M.D.

Vassar College

BACK of the fighting-lines worked an army of surgeons, and their achievements are already a part of the annals of the war. But it is very difficult to consider their work from the point of view of surgery alone. triumphs of the medical profession in the Great War—and there have been most brilliant triumphs—have by no means been due to the surgeon alone. great as his ability has been shown to be, and glad as we all are to accord to him the great praise which is his due. But these triumphs have been due to our knowledge of curative and preventive measures, as well as to the skill with which the surgeon's knife was wielded. This knowledge has come from researches and investigations carried on quietly in laboratories before the war, as well as during the more than four years of the terrific struggle. These researches have been made not only in the science and art of medicine, but in the allied and fundamental sciences of chemistry, physics, and biology. The victory, which meant the saving of thousands of lives of wounded men, of thousands of others exposed to trench fever and other diseases incident to the great crowding in camps and on shipboard, was eventually made certain by the thousands of doctors and trained workers who knew how to make full use of all these resources which science had placed at their disposal. Physicians and nurses of many nationalities, even of entirely different races, reared under

widely differing social and educational systems, were enabled, just because science has a common language, to cooperate in the common endeavor to rescue human lives.

For strenuous masters seized their youth,
And cleansed its dross and purged its fire,—
Showed them the high white light of Truth,—
There bade them live, and there aspire.

They had studied and searched and worked long years for these scientific truths, holding their minds always ready to admit new facts and theories so soon as they could be proven true; and long before our country entered the war, more than two thousand of our doctors and hundreds of nurses, ambulance-drivers, and stretcher-carriers had responded to the call for help from stricken France and Belgium—yes, and Russia, Poland, and Serbia—and to the everlasting credit of America were first, and will be among the last, in the field.

HOW WOUNDS BECOME INFECTED

When you get older and study the very interesting question of the surgery of the Great War more in detail, you will find then that mechanical skill, important and comparatively easily acquired, has never stood alone, but that its success has depended upon an understanding of the principles that concern the nourishment and the repair of tissues. Putting the tissues in the way of continuing their nourish-

ment and their repair enables them to throw off and to overcome the harmful little enemies which we call microorganisms, because they can only be seen by the aid of a microscope. These organisms are almost always present in every wound, even if the wound is received in what we might call a cleanly manner. When the object which makes the wound, however, carries into the body ground earth, fragments of very dirty clothing, and even body vermin, as is the case upon the battlefield, then the infection of wounds, as it is called, by these little enemies of mankind must be recognized, studied, and combated.

THE FIGHT AGAINST TETANUS

One of the most common and, early in the war, most terrible, invaders of battle wounds was the organism shaped like an infinitely tiny drumstick which causes tetanus, or lockjaw. We used to think of this trouble as connected almost entirely with firecrackers, toy cannon, and the Fourth of July, and there was for many years a superstition that this disease was most frequently caused by a wound in the foot made by a rusty nail. As is the case in many old superstitions, there was a grain of truth in this idea. It was not iron rust upon the nail, however, which caused the trouble; it was common, or garden, dirt, which had been fertilized largely by horse-manure. The common breeding-ground of this very dangerous germ is the intestine of the horse, from which it is transferred to the soil, where it has the power of living for a long time. Now, the ground of Northern France and of Flanders has been heavily fertilized for many, many years. It is a region largely of small market-gardens, and its soil was very full of these little enemies of mankind. Early in the war, wounds which ought not to have caused death of themselves became in large

numbers infected by these germs, and the unhappy people, soldiers and civilians, died in great numbers from the very serious disease of which the tightly closed or locked jaws are only one symptom. These cases occurred much more frequently in the thickly settled places where gardens abounded than in forests and sparsely settled places. The soil was examined, the germs were found to be very abundantly present in it, and, most fortunately, the remedy was at hand.

In the year 1889 a Japanese scientist, Kitasato, still living and actively at work in Tokio, had discovered the little drumstick-shaped organism of this disease, and shortly afterward he developed a cure or antitoxin which can be pricked under the skin with a little hollow needle. Laboratories were immediately called upon to make large quantities of this antitoxin for these European battlefields, and very shortly all victims of wounds, even if mere scratches, received an injection of a small dose of the tetanus antitoxin. case of more serious wounds, a second dose was given on arrival at the base hospital, and tetanus was no longer feared by the surgeon. Some of you older children may ask why this very valuable procedure was not used in previous wars. The answer to that is that we have had no recent wars, until this last one, fought over garden ground. The soil of the high, sunny veldt of South Africa was unfertilized, as were also the battlefields of the Russo-Iapanese War.

THE GAS-FORMING BACILLUS

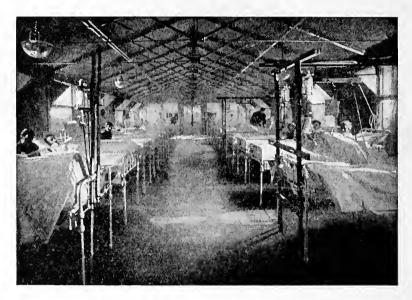
Another great enemy to the surgeon's work was the gas-forming bacillus, also an inhabitant of fertilized soils. This has nothing to do with the gas-poisoning instituted by the Germans, but is due to another micro-organism discov-

ered by a very eminent American professor, Dr. William Welch, of Johns Hopkins University. It is called gasforming because by its growth gas is formed in the tissues surrounding a wound, particularly in muscle tissues of large, deep tears such as are produced by shrapnel. This swelling extends and causes the death of the tissue, and, if unchecked, very frequently the death of the person wounded. During the latter half of the World War methods of treatment were perfected which have proved very successful in the prevention

see a case of this very important disease, searched hospital after hospital in a vain attempt to find one, where previously it had been so very common.

THE CARREL-DAKIN TREATMENT

You are doubtless all perfectly familiar with the fact that, so far as possible, all wounds must be treated antiseptically—that is, against sepsis, or infection of wounds by any micro-organisms; that knives, probes, dressings, the surgeon's hands, covered with clean rubber



A Ward in the War Demonstration Hospital

The Carrel-Dakin method provides for the sterilization of wounds by irrigation, with a germ-destroying fluid. The fluid container and tubes are seen above the beds.

and cure of this distressing and dangerous complication. At one time during the war it was found that in 33 per cent. of surgical cases dying after one particular drive, the cause of death was stated to be the wound, plus gas gangrene. The success of the treatment for gas gangrene may be shown from the fact that an eminent American physician visiting France during the last weeks of the war, and anxious to

gloves, should be what is called sterile—that is, free from germs. All these well-understood ways of treatment are as important and as true as ever, but the Great War has shown us that while they should never be neglected, they are not always enough. At a recent meeting of the American Medical Association, held early in June, 1919, at Atlantic City, the chairman of the surgical section, while giving all credit to

the originators of the antiseptic treatment, the great Pasteur and Lister, gave it as his opinion that the two great surgical developments of the war were, first, the practice of debridement, and second, the Carrel-Dakin method of treatment. These names and methods



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Dr. Alexis Carrel

The untiring and wonderful work of this noted doctor in the hospitals of France during the war won him imperishable fame and the deep gratitude of the afflicted.

are going to become household words during your lifetime, and so I will try to explain briefly what they mean.

Debridement was first proposed by Colonel Gale, of the British Expeditionary Force, and afterward popularized in France by Lemaitre. It simply means that the surgeon removes as completely as possible whatever has contaminated the wound, and also all hopelessly injured tissues. The thoroughness of this removal is the important factor in debridement, and enables many wounds to be at once and permanently closed which would otherwise have to remain open for drainage.

open for drainage. The Carrel-Dakin treatment, on the contrary, consists in a method of irrigation of wounds too extensive and too much infected for closure. You will see in the picture on page 288 a ward for patients needing this treatment. At the foot of the beds you will find, if you look closely, cans containing the Dakin solution. From the bottom of each can, or container, you will see extending a tube. This tube leads into the wound. where it branches, as a rule, into a series of smaller tubes which penetrate the wound in every direction. At first, in the use of this treatment, the solution flowed constantly over the interior of the wound. It was found, however, that this was difficult and messy, that an intermittent flow answered just as well; so that later the nurse or the patient himself, if he were able, could open a stop-cock in the tube once in every two hours, flood the wound thoroughly with the solution for a few moments, then stop it off again. The method was the invention of Dr. Alexis Carrel. of New York City; the solution was perfected by Doctors Dakin and Daufresne. The liquid is chlorinate of soda in a neutral solution with water. The application of this method has saved thousands of amputations and innu-

SKILFUL OPERATIONS

merable lives.

Many of these skilful operations would have been impossible without the constant use of the X-ray in locating bullets, shrapnel, and displaced bone. It used to be thought that the chest

cavity could not be freely opened and that the delicate lung tissue could not be handled without the use of pressure apparatus. This apparatus was so complicated that it could not be used in emergency hospitals, but the war has shown that chest surgery can be done

perfectly well without it.

Great and important knowledge has been put at our disposal in relation to the subject of shock to the nervous system by wounds, by fear, and by noise. Much new knowledge has also been obtained in the treatment of fractures or broken bones. The older-fashioned use of casts made of plaster of Paris has been replaced by better kinds of splints and other apparatus. Wonderful work has been done in transplanting pieces of bone from one part of the body to another, and even nerve tissue itself has been successfully transplanted. war has taught us a great deal about better methods of moving severely wounded persons.

Some of the most remarkable triumphs during the war have been in restoring the faces of men shot away bevond recognition. Here is where wonderful team-work has come in. To restore such a face, an artist makes a wax model, by which the scientific men endeavor to restore the features. First comes the general surgeon, but he must be assisted by a dental surgeon, if the wound involves the mouth. The services of an aurist and of an eye-surgeon may also be called in; and, working together with a common aim, these specialists have done work which seems nothing less than miraculous, in giving to the sufferer a countenance with which he can face the world again.

We must not forget, also, the marvelous work of the people who are reconstructing the bodies, and so the lives, of men who have lost sight, hearing, hands, arms, and legs in the frightful conflict. The Red Cross and army and navy hospitals will be occupied for years in making life livable again to these sufferers. The object is to give each man hope, and the ability for self-support.

The great lessons in surgery taught us by the World War are already being



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Wounded Soldier Without Either Arm

This picture shows the marvelous work of the doctors who made new arms and hands for men who lost them in battle.

applied in civilian life, in accidents of all sorts, notably in those occurring in great industries, such as in the manufacture of steel. Frightful burns often occur in these foundries, and great success is reported from the use in such cases of amberine, a mixture of paraffine, beeswax, and resin, which, sprayed upon large burned surfaces, protects the parts beneath without irritation, and so enables Nature to perfect her work of healing.

If Genius may be defined as the art of taking infinite pains, we may trace back the wonderful triumphs of surgery during the war not only to the bravery, the daring, and the skill of the great surgeons working behind the lines at the base hospitals in Europe, but we must also give due credit to the great minds and patient investigators in countless laboratories the world over.

CAMOUFLAGE AT THE FRONT

Baffling the Watchful Eyes of the Enemy
By Burges Johnson

VISITOR to any one of the French A villages occupied by our American troops during the war probably noticed first of all the fluttering fringes of tinted cloth strung across the streets from house to house, like the tattered remnants of old political banners, and along the highways leading into the town on the side toward the enemy, fences as high as telegraph-poles, on which were nailed screens of tinted cheese-cloth and sacking. Out in the fields, wherever army supplies were heaped, crude coverings had been constructed; posts in the ground over which chicken-wire, interwoven with straw and grasses, made a crude shelter and caused the heap of supplies to resemble as closely as possible a low hill similar in color to the surrounding fields.

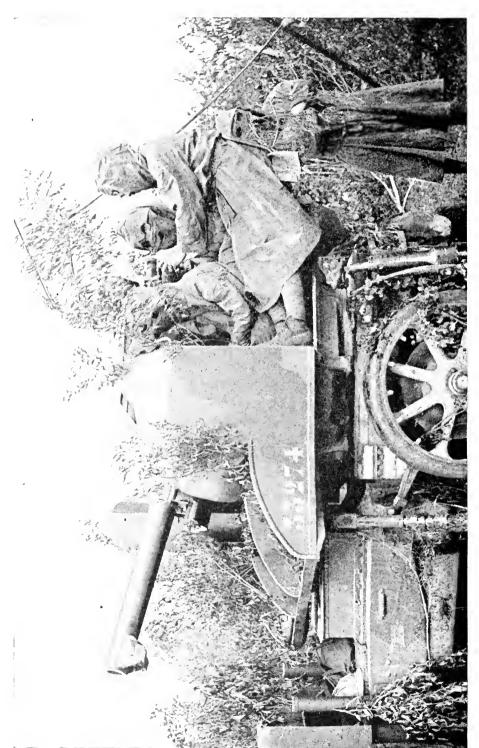
All of this was French camouflage, a word that has come to be so widely known that every boy and girl has found some way of using it. And yet, when our troops took over this French territory they did not continue all of those French camouflage methods, and the science in our army quickly developed in new directions. "I would as readily go into action without sufficient ammunition as without camouflage," re-

marked an American general who commanded artillery. Evidently this modern military science—which, nevertheless, is as old as the wooden horse which concealed the troops attacking Trov—is playing a great part in war. Americans who have just learned the word and use it readily in all sorts of connections, imagine that the camoufleur is a painter above everything else; and at the time when every one was trying to discover some new method of preparedness for war, a school of camouflage was started in a New York theater, where young men and women were to be trained in this new art.

"I am sorry for them," said an American major connected with our American camouflage unit in France; "there is disappointment in store for them, for, even if the war should continue, we would not be able to use any of those graduates at the front."

WHO ARE OUR CAMOUFLEURS?

Who are our camoufleurs? What did they do where the fighting was actually going on? One question at a time, please. Thirty-six per cent. of the men



Camouflaged Guns and Gunners

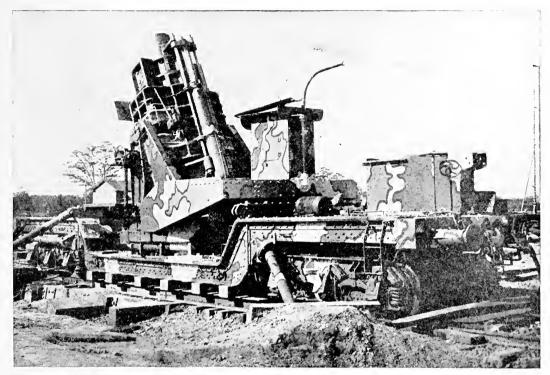
From a distance both men and guns merge into the landscape, but out of the innocent-looking branches death-dealing shots are sent.

in our American camouflage unit were architects in civil life, and this is the largest contribution of any single profession. Only 7 per cent. were artists. Ranging along between come engineers, landscape gardeners, professional men, chauffeurs, and what not.

This preponderance of architects is

CAMOUFLAGE DISCIPLINE

"I consider," said the major, "that in camouflage work the first importance should be given to selection of position; second in importance is what I may call maintenance of camouflage discipline; and third in importance comes



A Camouflaged Mortar for Dropping Shells on Dugouts

Many animals are colored like the country which they inhabit, so as to protect them from enemies. Many butterflies are "camouflaged" in this way. Man took this idea from nature and used it in war.

just as it should be, because the most important function of the camoufleur to-day is to select suitable positions for artillery, ammunition-dumps, barracks, communicating paths, and other objects which it is desirable to conceal from the eyes of the enemy. They must be men who think not alone in terms of color, but in terms of mass and related lights and shadows.

And this knowledge, as you know, is best supplied by the architects' training.

the construction of devices for concealment. But by far the most important of all is the selection of position. Concealment of a battery by means of wholly undisturbed natural barriers is the most effective camouflage."

Maintenance of camouflage discipline means, among other things, the enforcement of rules that men shall walk in those paths which the camoufleur has marked out, and that they shall not make significant new paths nor alter the appearance of any old ones.

Every one knows the eyes of the enemy were in his airplanes and his observation balloons. He photographed our positions from an astonishing height. and then learned to interpret the result of the photographs with remarkable Some things which we on the skill. ground would scarcely notice stood out sharp and clear on his films. For instance, a field of grass photographs like the nap on velvet. It has a deep greenish-brown color, due to the shadows of the grass-blades and the glimpses of earth which one sees looking directly down the blades of the grass. Walk across that field once, pressing down those grass-blades against the earth, eliminate the play of light and shadow about their roots, and the path you have left is a definite mark upon the aeronaut's film. It may guide him as plainly as a marked signboard to a concealed gun-emplacement.

It is the business of the camoufleur assigned to each artillery company to say how men shall approach their guns and how they shall leave them. Artillery officers who had not yet seen action were startled and sometimes offended to receive orders from some petty officer of engineers, who, after explaining that he was the camoufleur officer attached to the unit, presumed to dictate where artillery should be placed, and how the men of the unit should proceed about their business.

Camouflage means to the average reader dummy tree-stumps, papiermaché rocks, painted scenery, canvas highways hidden by cheese-cloth, and similar trickery. All this is a part of the work, it is true. Chicken-wire by the ton, green paint by the car-load, and other materials for the manufacture of scenic effect, were purchased and shipped to our camouflage-factory in France at an expenditure of a million dollars or so a month. But the work of the officers and enlisted men in the

camouflage division was not at this factory. Frenchwomen worked there, under skilled direction, and their work is a story in itself, which has already been They came by the day, bringing their babies with them, and leaving them at a day nursery operated by the United States Army, under the direction of the American Red Cross. That in itself is a story worth telling, of an institution unique in army annals. But the officers and enlisted men in the camouflage division were at the front, and as far front as the men of any unit, barring Casualties among the camoufleurs reached a high percentage of the enlisted strength at certain times. They must go wherever the action is hottest. and then attend quietly to their business, which does not include attacks upon the enemy. No severer test than this can be laid upon any man.

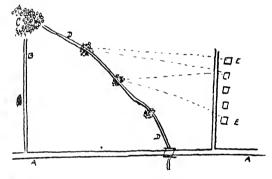
What did they do? Maps captured from the enemy on one occasion, for instance, were so marked as to indicate the supposed position of every American battery, just preceding the attack by our arms. An examination of those maps showed that in every instance the Germans had guessed wrong. meant that the American camoufleur was "on to his job." Undoubtedly the most important thing that he had to do was to educate the American army. Army officers must listen to lectures by skilled camoufleurs. Enlisted men must have explained to them the importance of obeying orders issued in the interest of concealment of position. It is hard to teach some of these things to impatient troops. The average artilleryman who has established his gun and finds that it is not a target for enemy artillery, takes it for granted that the enemy does not know it is there. He proceeds at his leisure to cover it with concealing branches and artificial screens, and sits waiting for action as contentedly as an ostrich. The camouflage officer

knows that the disturbance created by moving that gun to its position was probably observed by the enemy, who allows it to rest in a fancied security until the day for action comes. German would rather leave that gun undisturbed in a known position than frighten it away into some unknown position. So the camouflage officer tells his artillerymen, "Camouflage must begin before the position is established, and not afterward," and he issues regulations for the disposal of upturned sod, the concealment of broken branches, even down to petty details that irk the soul of the artilleryman.

. COSTLY CARELESSNESS

Here is a little diagram that will show how the Germans in one instance failed to enforce camouflage discipline, and suffered thereby. A is a highway. is a lane leading to a patch of woodland marked C. D is a stream, hidden here and there by clumps of overhanging bushes, running from the woodland across the fields and under a little bridge at the highway. E is a row of houses in a little battered village, fronting what is left of a village street. this was shown in photographs taken from airplanes. Somewhere in that neighborhood German artillery concealed and made trouble for our troops. The easiest place to establish practical concealment for anything is at the edge of a wood, just where the texture of the meadow changes to the texture of the forest in a photograph. Our observers thought that the guns were hidden in the woodland, and our artillery searched it out thoroughly. But one day the aerial photographs showed several fine lines running from the houses, E, across the village street and the meadow-land to the brook, D, just where clumps of bushes grew along its banks. That was enough for

the shrewd interpreter. Our gunners changed their objective, and smashed the German artillery which lay concealed in the dried brook-bed. What had happened? The German artillerymen had doubtless been ordered to move from their billets, E, along the village street to the highway, A, along that highway to the bridge, and along the brook-bed to their guns, which had undoubtedly been brought up through that brook-bed from the woods. In their hurry to get home one particular night, these gunners had walked across the fields to their billets, and the pressed



A—Highway. B—Lane. C—Woodland. D—Partially hidden stream. E—Row of houses.

grass showed in the photograph and betrayed them.

It may be said, then, that camouflage is the art of utilizing natural environment for purposes of concealment. Now and then it is necessary to create artificial environment, but the less this is done the better. A visitor to the battle front in France found lofty screens, it is true, protecting roadways, and branches and woven basketry covering guns or dugouts. But after all, the most striking thing about the battle front was that it was made to look as natural as possible. Barracks, gun-emplacements, ammunition-dumps, bodies of troops, were placed where Nature herself had constructed sufficient concealment, and every effort was made to leave that natural environment undisturbed.

THE WEATHER AND MILITARY OPERATIONS

The Weather Man Plays an Important Part in a Campaign

THE weather has always been an important factor in war and must be reckoned with in planning military operations. It is said that the Germans had sixty meteorologists and forecasters attached to the headquarters and army staffs, for it was a tremendous advantage to know what the direction of the wind was to be before starting a gas attack or putting up a smokescreen.

Fog hinders the operations of the aircraft. Great heat saps the energy of troops. Rain means mud that may be knee-deep or even waist-deep. This interferes with all transport, ammunition, and general supplies, and hampers the movement of guns, great and small, both in the advance and in a retreat.

"Armies so huge as ours," mourned a soldier, "are fearfully weather-bound. Many a lad who went west would now be alive if his boots hadn't been so hopelessly clogged. . . . Oh, this cruel mud!"

Many a tank has been wrecked in the inexorable slime, held fast as a target, and shelled by special rifles. Rain was against the English in the Pilken Ridge attack, and in the battles of Neuve Chapelle and Hill 60, and at Loos. Wet mists and quagmires were characteristic of the Ypres salient.

Snow changes the entire aspect of a landscape and may upset the calculations of the artillerist. A hard frost may help a defeated army to save its batteries by hardening mud that would otherwise prevent the removal of heavy guns, or it may, by shutting canals or rivers to navigation, seriously hamper

the transport of stores. And weather certainly does affect the temper of the combatants.

WEATHER AND MORALE

That sturdy Englishman Doctor Johnson always denied that the weather influenced his spirits. Possibly this was true in his Fleet Street haunts; but on the famous Highland journey the great man gave way to gloomy thoughts on a trip which was marked by "almost one continued storm." There is conclusive evidence to show that soldiers' morale is affected by climate, and in the Great War the armies have sampled every known variety, from the Arctic Ocean to the Central African lakes.

Steadfast heroes have frozen to death in Gallipoli blizzards; they have also died of heat-stroke in the Persian Gulf, where hospital-ships have had to stop and turn round to coax a little air into suffocating wards.

In the sea affair weather is likewise all-important. In the Falkland Islands battle the German cruiser *Dresden* escaped owing to the sky becoming overcast and cloudy as early as four in the afternoon. And in the Jutland fight torpedo attacks upon ships were favored by low visibility, which also enabled enemy vessels to keep out of range.

On that mighty day, as Admiral Jellicoe told a meeting at the Albert Hall, "the Clerk of the Weather acted as he had so often done during the war—on the side of the enemy."

Of course, we are always likely to think that the weather, like other unavoidable circumstances, favors the other fellow. Still, it did seem like meteorological pro-Germanism that when, during the period of air raids on London, a moonless night gave promise of immunity, a brilliant aurora betrayed the city to the Zeppelins. Did the Germans forecast the Northern Lights? Anyhow, they started their last great offensive in March, apparently knowing that the weather was going to be abnormally fine for that usually unfavorable month.

to the wind and weather, linked with our traditional mastery of the sea.

The shrewd and able commander, whether by land or sea or air, takes advantage of every change—fair or foul, rain, hail, wind, or snow, fog, frost, or sweltering heat, with all its attendant phenomena. When men carrying food and boxes of ammunition to the front lines came to grief in icy pits and clay-holes that were thigh-deep, a Canadian general bethought him of the



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British Tommies Training in Snow-covered France

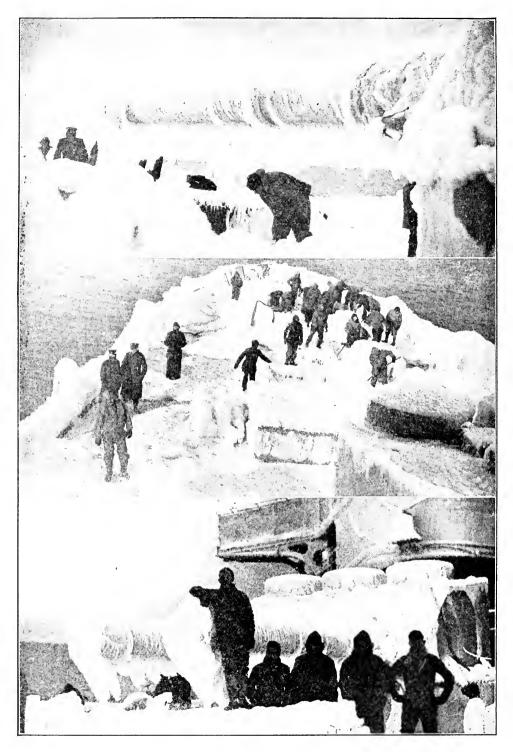
A British official photo of inspection by the commanding officer of a British camp in France. They had to endure the extremes of heat and cold.

But a good commander, while he takes advantage of the weather, is not bound by it.

The German artillery specialist, August von Mackensen, captured Constanza in a furious rain-storm, and in the far-off days of the Spanish Armada menace we attributed, not our delays and disappointments, but our victories,

Indian way of weight-carrying by means of "tump-lines"—a broad strap round the forehead, steadying the load on the carrier's back and leaving both arms free for balancing.

Weather vagaries arise only to be fought by quick wit and resource. It was the Russian leader Alexieff who put his troops into long white garments and



The Return from Duty

Here is an example of weather conditions that were continually met by the Allied sailors and our own Navy boys in their search for German submarines during the winter months. But neither ice nor snow nor the icy waters of the North Sea could keep the brave sailors from their dangerous duty.

so made them almost invisible against the fresh-fallen snow. The Germans from the first studied weather changes as a factor in the conduct of war. They knew that a fall of snow could easily add a ton to the load of a Zeppelin airship. Then a thirty-mile wind could reduce the speed to one-half, and there was, moreover, the intense cold of great heights to take into consideration.

Those cumbrous raiders came over on an east wind and went back against it. The German meteorologists collected data all the way from the North Sea to a point in Russia one thousand miles to the east, and from the Arctic Circle down to the Adriatic. This enabled them to forecast raid weather from the east at least twelve hours ahead, and send warnings by wireless to airships over England or the North Sea. This sometimes accounted for the abrupt departure of enemy craft which had barely touched the English coast and were recalled.

WEATHER SPIES

Of the German meteorological service, Mr. Ushaw tells us in The Windsor Magazine that while Hamburg was its general headquarters, the chief weather station was at Lindenberg, on Lake Constance, with auxiliary stations at Frankfort and Aix-la-Chapelle. in regard to winds were especially gathered at Lindenberg. Sixteen stations contributed news to this center, having sent up balloons ten thousand feet or more to note signs. Lindenberg sent to the flying-stations the predictions for calm weather that were likely to be followed by an air raid on England. But the upper strata of the air are not yet explored as they must be before flights across the ocean with passengers and merchandise become common occurrences.

Returning to the actual application

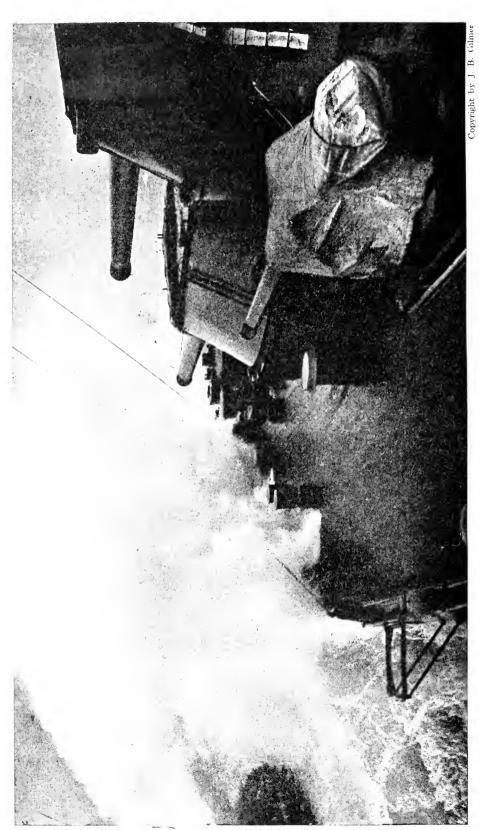
of weather observation in war, the author repeats:

"Our scientific enemy has always considered the weather, and set spies upon it as upon other phases of war. The famous March onslaught was timed to begin in a fog for the sake of surprise. A month later came snow-squalls and a temporary lull. On clear days the Germans ordained that infantry might not move with more than four men in a group, or cavalry more than two together. Between vehicles there must be a space of at least three hundred vards. In hazy weather forty footmen might move in concert, twenty cavalrymen, and ten wagons. This applied to the first zone. In the second zone the groups of 'misty days' in the firing-line might assemble in clear weather at intervals of five hundred yards.

"German gas regiments contained trained meteorological observers, for any error in calculation might see the poison vapor blown back whence it came, with fatal and panicky results; this has frequently happened. If the wind be too strong, the gas is dispersed, or else it moves too fast. If a breeze were too light, the fumes took too long to cross No Man's Land; the best wind was one of between five and twelve miles an hour.

"Weather prophets also guided the German submarines. Smooth water and long summer daylight have advantages; but so have the winter nights, which enabled these craft to come up and recharge their batteries, to rest and refresh the crews, and make long trips at the surface in quest of new prey.

"But the English have never neglected the study of weather as a prime factor in a scientific war of ever-increasing complexity. In the classic Zeebrugge affair Admiral Keyes waited for 'certain conditions of wind and weather' before he gave orders to move across. A seafog was hoped for, with light airs favor-



When Seas Ran Mountain High

Weather conditions affected both sea and land warfare. Smooth water was necessary for effective submarine work. The Allies had nothing to fear from the deadly U-boat in such weather as shown here.

able to the use of smoke-curtains. A shift of the wind accounted for many of our casualties, but it held well enough for the *Vindictive* and her consorts to approach the Mole. At Ostend the wind was uncertain, and trouble was caused (our First Lord has told us) 'by mist, rain, and low visibility, with consequent absence of aerial coöperation.'

"The Italian exploit at Pola, when an Austrian dreadnought was destroyed, was favored by a very dark night and an offshore wind which kept all sounds from the landward side. One foggy night, when Paris was quite sure she would be free from attack, nine German aerial squadrons deliberately selected that occasion, feeling sure of a surprise success."

Experience taught England the necessity of more intensive weather observation, in peace and war, and she acted accordingly. Telling of the work of the University of Manchester with self-recording balloons and kites on Glossop Moor, Mr. Ushaw continues:

"Data of temperatures, pressures, humidity, and currents have been obtained at heights of fifteen and even twenty miles; and it has been found that there is a fairly regular fall of one degree Fahrenheit for every three hundred feet above sea-level. This continues for six or seven miles up (higher than the highest mountain on earth); but from there to the eighteen-mile level—the so-called 'inversion layer'—there is no further change. There are no clouds above six miles, and at two miles high the atmosphere, even in July, is always below freezing-point.

"At these great altitudes our pilots are warmed with electric suits, the current being supplied to fine wires suitably insulated within the clothing. So it is the heavens which are now being explored, with peace as well as war in view. Wind velocities are observed by sending up small unmanned aerostats,

and watching them from the ground by theodolites. It is a novel field, and, like others in science, it has received astonishing impetus from the demands of war."

HISTORIC CAMPAIGNS AND WEATHER

It is impossible to tell the war-history of any country without giving some attention to the weather factor. In an offensive campaign an important part is played by frozen rivers and lakes permitting the transportation of armies, ammunition, and baggage. D. Henning, of Leipzig, in writing on this subject says: "In the war-history of Germany, the successful siege of the city of Brandenburg, during the winter of 927-28, by the German king, Henry the Fowler, when the whole water-supply of the city became frozen, and the victory of the Great Elector of Brandenburg (January 16-19, 1679) against the Swedes in Courland and Livland, which would have been unthinkable without the freezing of the Kurisches Haff and the Frisches Haff (extensive lagoons in east Prussia), are two remarkable cases of the strategic importance of weather conditions. Other not less famous instances are the passage of the frozen Danube by the Goths under King Theodemer in 462, and by the Huns under their leader Zaberga in 557-58.

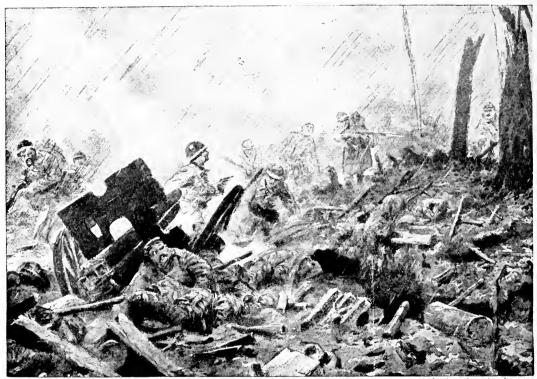
"It very rarely happens that great stretches of the Baltic Sea completely freeze up. In 1657–58 King Charles X of Sweden took advantage of the severe frost in his war with Denmark, transporting his army of 12,000 men and its heavy artillery over the frozen Skagerrack and Kattegat, from Jutland to Zealand, thus carrying the war into the enemy's country. The Danes were beaten and asked for peace (February 26, 1658).

"The strangest campaign, however, in which a severe frost played a decisive

part was the French invasion of Holland under Pichegru in 1794–95, not very far from the present war-scenes. The Dutch counted on the inundation, natural and artificial, of the battlefield. Suddenly, December 23d, a great frost set in. Pichegru saw his opportunity and, five days later, crossed the frozen Meuse. But an event, perhaps unique

"Of course, sometimes the frozen crust suddenly begins to thaw, and King Charles XII of Sweden, thinking of the luck of his ancestor, tried to outdo Charles X by attempting to get over the Oeresund on skis. He failed miserably.

"Everybody knows the tragic fate of Napoleon and his army during the



Leslie's Graphic Service

War-Blast Strikes Butte de Tahure

In rain or snow, extreme heat or bitter cold, the soldier served. War is a cruel master, and the men in the trenches often suffered tortures from exposure.

in the entire history of warfare, happened January 25, 1795, when the French cavalry took possession of the Dutch fleet, which was helplessly frozen in near Texel! Holland had, of course, lost the war, and her ally, England, to wreak revenge for her disillusion, took possession of all Dutch colonies, retaining the better part of them even after the conclusion of peace.

Russian winter of 1812. Heine's famous joke that Bonaparte's geographyteacher was responsible for this terrible catastrophe is out of place, for the great general could not foresee the extraordinary and universal severity of the European winter of 1812.

"Napoleon's tragedy was surpassed by the fate of the English garrison of Kabul in 1842; the victorious Afghans granted to the little army of 4,000, and the 12,000 civilians accompanying them, free passage to India, but only one single survivor, a certain Doctor Brydon, reached India to tell the horrible news.

"'In the light of the above facts, it is interesting to note that the generals of all times did their best to avoid the hottest and coolest months of the year for their decisive battles. July and Au-

gust, middle of December to February, are rarely met in mankind's war-calendar. Up to the nineteenth century, the winter, generally speaking, formed one long holiday for the sons of god Mars. The winter camps were generally broken up in April. The first great European winter battles are those of Pultusk (December 26, 1806) and Preussisch-Eylau (February 7 and 8, 1807)."

BATTLE TELEPHONES

How Orders and Information Are Transmitted at the Front

OUTSIDE the service, almost unknown, were the daring deeds of the gallant linemen of Uncle Sam's Signal Corps, who fixed battle telephone and telegraph wires making coöperation of infantry and artillery and perfect coordination of all branches of the service possible. To keep the means of communication open on the modern battlefield, these men underwent the greatest risks and were frequently killed while at work, but they persevered, restoring wires as fast as the enemy shells disrupted them.

In the battle of Seicheprey, it is said that the Germans concentrated their artillery fire on the American telephone and telegraph wires, which were in consequence cut many times.

But our boys were not to be beaten in that way, and almost as fast as the enemy shells disrupted them the men of the Signal Corps, in the face of the heavy bombardment, restored the wires.

This is an example of the dangerous work of the daring linemen who fix battle telephones. It was heroic work, yet outside of the service it was almost unknown, although one of the most important of all scientific ends of modern warfare.

A MODERN BATTLE

When the fighting begins over the top, with the charging infantrymen go the linemen, generally with the second wave, in charge of an observing officer, and immediately in magnificent disregard of terrible danger they begin coolly stringing lines behind the advancing first line, so that the artillery may be kept informed of the advance or told to concentrate their fire on a certain Boche gun crew who, in a well-protected position, are making things obnoxious for our boys.

Usually the linemen as quickly as possible make for a point where they can establish an observation-post, and as they pass on and through the enemy's barrage they unroll their line and one of them carries a field telephone through which they somehow manage in the din of battle to make themselves heard.

That telephone is like a battle-flag, and many a man goes down with it, only to have it picked up and carried forward by another of these non-combatant troops whose business is only to serve, not to fight.

When the battle moves forward rapidly and the telephone and telegraph

wires have to be moved at top speed to keep up with the advance, the importance of the signal service is demonstrated in a way as impressive as the onward rush of light artillery going into action.

A division is ordered to move to another position; with it go two cable wagons, carrying cable which is attached at one end to a permanent line. They are autocrats in their way, these wiremen, and no one is permitted to interwhile, farther back, other horsemen tie the line and make it secure.

They are in the forefront of every advance and in the retreat are sometimes the last to leave the front line, where they stick to the end of their wires under terrific shell-fire until ordered to rejoin their commands if they can get through alive.

At another time when no real battle is raging, yet No Man's Land is swept by constant artillery fire, when the night



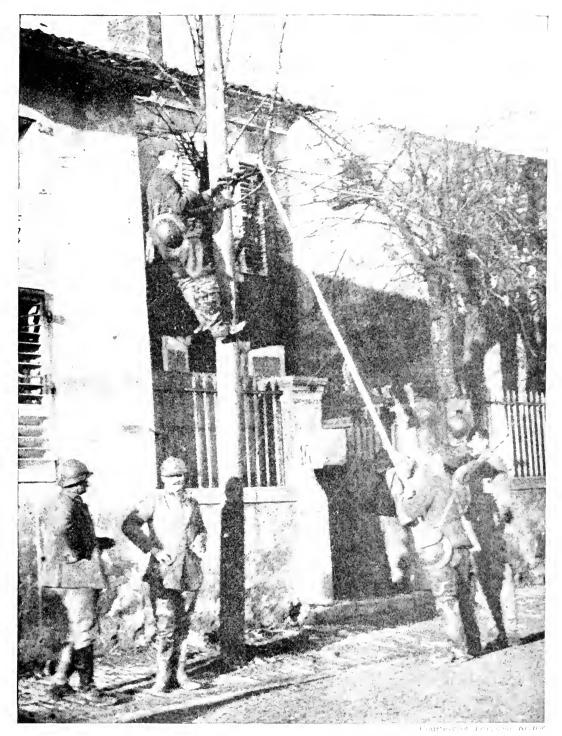
Courtesy of Leaphone Kertew

A General View of the Firing-Line in Operation

The telephone-bench can be seen in the background. A gun on one side, and a telephone on the other, was a frequent sight in the Great War.

fere with the swift execution of their work; they have the right of way over troops and supplies, and at a rapid trot dash through the roads, the men on the wagons paying out the cable. Back of the wagons ride men on horseback who with hooked sticks toss the cable into ditches and behind hedges out of the way of troops and transport wagons,

is dark and when the troops huddle in their trenches and dugouts to keep warm and escape the stray enemy bullets, somewhere in the battalion headquarters signal office or dugout where the hundreds of wires from the trenches and observation-posts center and where the receivers hum with the constant tremors of a world under fire, a lineman lounges



American Telephone Men in France

Maintaining an important line of communication to the battle front. When armies are as big as they were in the Great War, it is absolutely necessary that each part of the Army should be able to talk to the others. The men who saw to it that lines of communication were not destroyed performed as great a service as the man with the gun on the firing-line.

in a corner, rolling a cigarette and occupied in his own particular thoughts.

"The wire to B Battery is down," the lineman's superior officer says, turn-

ing to him.

"All right, sir," is the answer. And the man climbs out of the dugout, repair-kit over his arm and tin hat on his head.

In the trench he finds the wire that is broken and begins to follow it along. It is hot work, shells are dropping thickly, but he doesn't mind much. He follows the wire down a communication trench and then for a long time out into the open, where he has to crawl along, looking for the hole that will mark the place where the line has been broken.

He gets nearly there when a stray shell ends his career. After a time, back in the dugout, the first man failing to report, another one is sent out; perhaps he is luckier than the first re-

pair-man and finds the break.

Then he has to sit down in the shellcrater, the smash of bursting shells so close that sometimes he is half buried in dirt, calmly making the connection that will enable the observation officer up front to get in touch with his battery again. If he gets back to the dugout he will be sent out again and yet again if the bombardment is heavy and wires are frequently broken. Often for days and nights at a time these men are under fire, snatching a nap now and then in the dugout between breaks.

The linemen also have regular patrols, stretches of line which have to be constantly examined, not only for breaks, but also to make sure that they have not been tapped by enemy spies in such a way that every bit of information sent over them finds its way to

the Germans.

One day a lineman passing along a road in the Aisne district noticed a lot of cable lying at one side. He started to coil it up and found that a piece of wire had been tied to the main line. When he traced it he discovered that it ran to a havstack. He went on, tapped the line, and sent in word to headquarters, and an armed escort found a spy hidden in the hay with several days' supply of food.

What the nervous system is to the human body the telephone and telegraph system were to the modern army, which could not see, feel, or move without them. It must be remembered that battle fronts to-day are conducted on a different principle from what they were in previous wars. Then the forces of opposing armies, as a rule, only extended a few miles; to-day a hundredmile front is common and the army commander wishing to move a portion of his line fifty miles away, or to change the rapidity of his artillery fire, or to receive information of enemy movements, would be helpless without the aid science has given him, the electrically controlled slender threads of copper.

THE AMERICAN BATTLE PHONES

Despite the constant efforts of the Huns to prevent it, somehow, all along the Allied fronts, the lines were kept open all the time or were broken only for short intervals.

The tremendous use of the telephone and telegraph in the World War was partly the result of the impetus arising from the American application of electrical communication on a large scale in the Spanish War. Uncle Sam's Signal Corps, as it now exists, is a comparatively recent evolution.

The idea first arose in the mind of a young Army surgeon, Albert James Myer. The office of signal officer of the Army was created in June, 1860, the first of its kind, and Myer was appointed. He was sent with an ex-

pedition against Navajo Indians in New Mexico, and his crude apparatus at once demonstrated its worth.

When the Civil War broke out he was ordered East and opened a school for signalers, and in that was the definite beginning of the present Signal Corps. Wires were carried on horse- or muleback then, the instruments were imperfect, and telegraphic communication

But the tasks that confronted our signal-men in these wars were play compared with work that was being done every day by these boys on the Western front. They had an area to cover as big as some of our largest Western states and they went at it with vigor and efficiency.

The hardy linemen who have strung lines and repaired breaks on the Western



American Soldiers in France Receiving and Recording Telephone Messages

Despite the constant efforts of the Germans to prevent it, the telephone lines all along the Allied fronts were nearly always kept open.

was a rare and precious thing. The service took on tremendous importance in the Spanish War and followed the troops through Cuba and the Philippines, and in China was the only means of communication for a week between Peking and the rest of the world.

plains, or battled with great floods and storms in the Rocky Mountains, took to this new work with a zest which was inspiring. On the foundation of the French system they built a signal system that was a model of its kind.

Up to within four miles of the front,

construction was not different from what it is in the United States. The wires were strung on poles and most of the poles were planted by the French.

But inside the shell-torn section that stretched at least four miles from the front, wires had to be protected by being buried from six to eight feet deep, so that only a direct hit by a large shell would disturb them. Within half a mile of the front not even this protection was sufficient, as the shells churned and rechurned the ground. Therefore all wires in this zone were duplicated and were strung along both sides of the trenches. Sometimes a trench wall was covered with wires.

These hundreds of lines back of the front were joined into main lines or

cables which held from twenty to fifty circuits.

When our Signal Corps began to move to France, calls were at once sent out for more skilled constructionmen, linemen, engineers, and other experts in all that goes to make up a successful telephone system at the front. Fortunately for Uncle Sam, hardy construction and repairmen of the various telephone and telegraph companies, men who have worked on the transcontinental line, men fitted to cope with the most difficult weather conditions, volunteered in large numbers, and among them were some of the foremost telephone engineers in the world, which perhaps explains why America led in this important branch of war work.— Reprinted from The Scientific American.

THE JUNKMEN OF THE WAR

What Becomes of the Wreckage of the Battlefield

A MODERN battlefield is a huge junk-pile strewn with tons of wreckage of every sort which cost, when new, millions of dollars. Any one who could have seen such a field the day after a fight might well have asked what becomes of all this costly wreckage. The answer is that modern efficiency methods have been introduced into the present war and that most of this battle metal was salvaged by veteran soldiers known in the army as "ragpickers," who worked under almost constant fire to reclaim the highly valuable wreckage of battle.

All kinds of old metal—iron, steel, copper, lead, bronze, and nickel—have more value to-day than ever before in the world's history, and a modern battlefield, one of these vast seas of interlapping shell-holes, is the greatest junk-

pile in existence. As the prices of junk go nowadays it is a veritable gold-mine to the army who can reclaim its wonderful treasures. Since the war the salvage work has continued.

Standing in the midst of such a battlefield, one sees French shells which were not fired because the artillery advanced when the enemy fled; German shells which failed to explode; mudcaked rifles, fallen from the hands of the dead or wounded or abandoned in flight, grenades left behind during the progress of the attack, damaged cannon and other bulky weapons, helmets, pieces of leather, pieces of clothing, debris of every description, lying pellmell, haphazard, on the abandoned battlefield, lately all engaged, now silent as the dead, also to be seen here and there.

OFFICIAL RAGPICKERS

What becomes of all this highly valuable and huge mass of wreckage? As this war was largely conducted by business men on business principles, most of it is saved. Every army had

much of the debris they handled was highly dangerous because of the immense amount of explosives included which, for one reason or another, had not spent themselves. So, after all, it was the real work of brave soldiers.

Another reason experts were required



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Tommies Clear Away Debris

Every army in the Great War had a large force of laboring-men called "official ragpickers," who worked fearlessly on all fronts to reclaim much of the wreckage which was considered worth keeping.

a large force of laboring-men, "official ragpickers" they have been called, who worked fearlessly under fire in France, Flanders, and Italy—in fact, on all the battle fronts—to reclaim much of the wreckage, all really worth keeping.

The work required intelligence and men who were experts in their line, as is that to a certain extent they had to know exactly the material value of the various kinds of junk discovered, so that it could be properly sorted and classified and nothing that was valuable cast aside, while that which was worthless was left to decay.

The battlefield "ragpickers" of the

Allied armies were carefully formed into companies. The personnel of these organizations were mostly old soldiers, experienced, seasoned, unafraid; men who had seen much hard service, but who were, for one reason or another, more or less incapacitated for continued active service in the trenches.

At the break of day, immediately after a battle, these workers could be seen searching laboriously over the tortured earth, exploring it, as they went carefully along in every direction, for treasure trove. Every now and then they would stop when something of considerable value had been found and, gathering in small groups, they would combine their efforts in seeing that it was removed to the rear on the motor-trucks and wagons which followed in their wake.

These conveyances were supplied with hoisting devices for the lifting of the heaviest junk, such as cannon. Besides, they carried ropes and blocks so that the salvaged material might be safely packed on board.

Although, when necessary, the "ragpickers" resorted to various forms of camouflage to conceal, as far as possible, their operations from the enemy, they were not always successful, as the Germans, jealous of their rich finds and their own consequent losses, were always on the lookout for them, and the cry would often go along their lines that the "ragpickers" were at work. It was then the business of the Hun sharpshooters to pick these men off whenever the opportunity for a good shot offered. So these "ragpickers," though their task may seem quite as humble as that of the old junkmen in the city streets, are real heroes who constantly ran great risk of their lives, and were, as a matter of fact, not infrequently killed at their work. Yet those who were left were undisturbed by the loss of their companions and went ahead with their work.

Everything possible that they found was utilized on the spot—such things, for instance, as small abandoned depots of cartridges or grenades. Everything dangerous, such as defective unexploded shells, was immediately destroyed for safety. The rest, and it was the vast amount of their findings, was sent to the rear on the trucks and wagons.

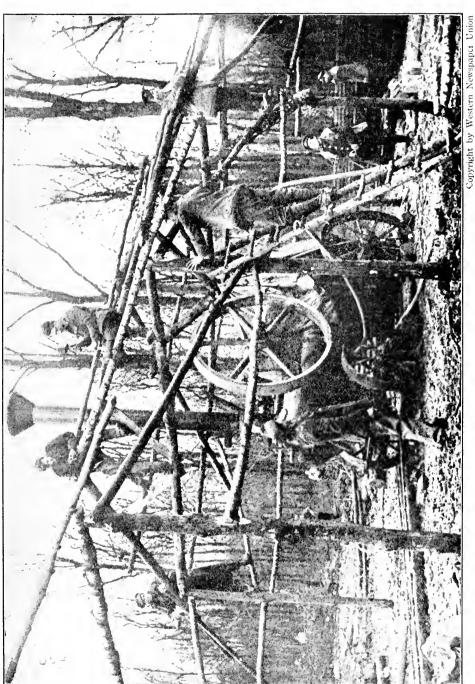
RECLAIMING THE "WOUNDED"

The work was naturally slow, as it could only be conducted in the uncertain light of early morning and when the evening shadows fall, and it might take a week to clean up a battlefield properly. In so far as was possible a preliminary classification was effected on the spot—that is, if the enemy was not too active to prevent this, but it was in the rear, at the great sorting centers, that all this highly valuable debris for the salvage of which men risked their lives was cleaned and repaired and sent back to the front for further use.

Here were located hospitals for slightly wounded cannon, machine guns, and rifles, where furnaces blazed night and day and the vulcans worked amid a thunderous crash and roar. Here were broken rifles to which a new lease of life was given and thus much money saved in the soldiers' most vital equipment.

The butts and wooden parts were repaired or renewed, the damaged metal parts were replaced by new ones, rusty barrels were freshened up, and so in a day or two these heaps of old iron, as they were brought in from the scene of conflict, were so many brand-new rifles for all practical purposes, doing deadly execution in the trenches for perhaps many months to come.

When they had been safely transported back of the lines, the bigger guns, which it was impossible to repair outside of a well-equipped munitions-plant, were shipped to such places in the interior,



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Sawmill Behind the Lines

Nothing surprised the French people more in the war against Germany than the number of labor-saving devices employed by the Americans behind the lines in France. The sawmill shown in this picture is only one example of Yankee ingenuity. One of its uses was to make over battered cannon and machine guns.

back in the towns and cities not under fire, not to be returned to the front until weeks later, perhaps, when they were made over quite as good as new and ready to do fresh and deadly work on the ranks of the enemy.

No one who has not been on the battle front in France and Flanders has the slightest conception of the vast amount of munitions and metal, only junk when found by the "ragpickers," 2,000 trench bombs.

1,048 rifles.

Last November, in a certain liberated region, the "ragpickers" of the Army services "salvaged" the following quantities of material:

32 tons of red copper.

40 tons of bronze and nickel.

60 agricultural machines.

2,600 various tools.

800 yards of narrow-gage railway.



Courtesy of Leslie's Weekly

Intrenching the Ground They Take

French sappers filling their car with tools to be used in digging new trenches in the Somme territory. From July 1st to September 15, 1916, the French advanced along a fifteen-mile front to a depth of five to ten miles, and the front was steadily widened.

which has been economized in this way. If they had, they might understand its huge money and military value, and why the commanders of the armies were willing to risk the lives of their men in its salvage.

Perhaps a slight idea of its great value may be obtained from the fact that on the battlefields of one single army during a single month the following material was collected:

2,000 tons of iron and steel.

32 tons of copper.

1,000,000 rifle cartridges.

Beams, telephone wire, leather, and so forth.

What better proof could be demanded that the Army "ragpickers" did good, highly helpful, and efficient work? These figures in themselves answer the question whether the cleaning up of a battle-field was justified.

To inspire the soldiers of the Allies to further action and deeds of valor, and also to make them fully acquainted with the arms of the enemy, the French Army held, just back of the front, a unique and most impressive exhibition of the

German cannon salvaged from the battlefields. French, American, and English soldiers were given every opportunity to make a careful study of the different types of small German artillery, and it proved to be of great help and benefit to them.—Reprinted from *The Scientific American*.

GAS WARFARE

A New Weapon of the War Which Wasn't So New, After All

AS, or, as it came to be known, chemical warfare, was one of the most terrible and one of the most effective weapons used in the entire war. The name gas warfare came from the fact that when the Germans first used chemicals to kill and disable the Allied soldiers they used chlorin gas. Later, however, chemical vapors, liquids, and even solids in the form of dust or smoke were widely used in an effective way.

The Germans used gas despite the fact that the rules of war, as drawn up at various Hague congresses, expressly forbade it. At the Hague Congress in 1899 the governments represented—and all the recent warring powers were there represented—pledged themselves not to use any projectiles whose only object was to give out suffocating or poisonous gases. At the Congress of 1907, article 23 of the rules adopted for war on land states: "It is expressly forbidden (a) to employ poisons or poisonous weapons."

In spite of this, poisonous and suffocating gases were used early in the war, and, after the original use by the Germans, by both sides. Nearly all explosive substances used in projectiles give out poisonous gases, which, if inhaled in sufficient quantities, cause suffocating spasms or even death, but there is a long step between these and gas projectiles whose principal object is to spread poisonous gases when they explode.

The gasp of horror which passed over the civilized world after the first news of the Germans' original gas attack showed conclusively that gas was an unexpected development in the fighting. From a military standpoint, however, the use of gas was not new, but it was the great scientific advances of the last few generations which made it possible on a large scale and made it so successful and so terrible. Science has not only given us electric lights and steam railroads, but it has proved its efficiency in every field of employment, including the horrible one of chemical warfare.

THE ANCIENTS USED GAS

As a matter of fact, the use of chemicals as a weapon of offence, like many of the other weapons in common use during the war, such as the catapult, flame-projector, trench knife, and sling, is an inheritance from the early ages, amplified, improved, and made more destructive by the aid of modern science.

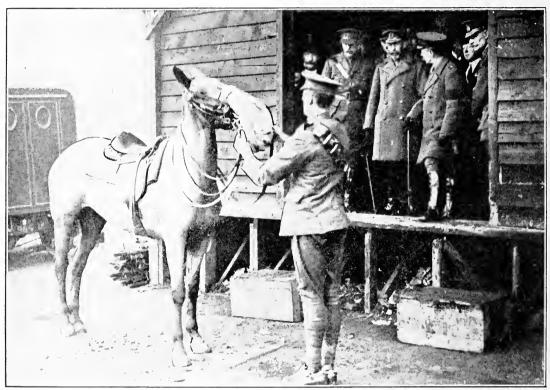
The first recorded effort to overcome the enemy by the generation of poisonous and suffocating gases seems to have been in the wars of the Athenians and Spartans (431 to 404 B.C.), when, in besieging the cities of Platea and Belium, the Spartans saturated wood with pitch and sulphur and burned it under the walls of those cities in the hopes of

choking the defenders and rendering the assault less difficult. They also melted pitch, charcoal, and sulphur together in caldrons and blew the fumes over the defenders' lines by means of bellows.

"Greek fire" was used by the Byzantine Greeks under Constantine about

to ignite the petroleum, which in turn ignited the resin, pitch, and sulphur. This flaming mixture was delivered against the enemy by means of syringes in the shape of dragons and other monsters with wide jaws.

The first use of gas in modern warfare occurred April 22, 1915, when the



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King George on an Inspection Tour of British Industries

Great Britain's monarch and some of his British officers are examining the new masks for horses.

A.D. 673 to destroy the Saracens, and the Saracens in turn used it as a weapon of defense against the Christians during the Crusades. This Greek fire was not only inflammable, but produced clouds of dense, blinding smoke and asphyxiating gas. Its chemical composition was supposed to be a mixture of quicklime, petroleum, sulphur, and such other inflammable substances as pitch, resin, etc. The addition of water to the quicklime generated enough heat

Germans liberated great clouds of gas against the Allied trenches near Ypres, surprising and frightening the troops into loss of discipline and causing a large number of casualties.

A MAJOR'S STORY OF THE FIRST GAS ATTACK

The heaviest fighting had been going on for two weeks. A favorable wind carried the chlorin gas over the British



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British Gas-Masks for Horse and Man

Both transport-wagon and artillery horses were always supplied with gas-masks like their drivers when they entered a suspected gas area. It was not always an easy task to get them to wear them.

lines, and, chlorin being much heavier than air, went down into the trenches and dugouts and was difficult to remove. It caught men wherever they

happened to be.

Major S. J. M. Auld, of the British Military Mission to the United States, says: "I happened to be present at the first gas attack and saw the whole gas business from the beginning. The first attack was made in April, 1915. A deserter had come into the Ypres salient a week before the attack was made and had told us the whole story. They were preparing to poison us with gas, and had cylinders installed in their trenches. No one believed him at all, and no notice was taken of it.

"Then came the first gas attack, and the whole course of the war changed. The first attack, of course, was made against men who were entirely unprepared—absolutely unprotected. You have read quite as much about the actual attack and the battle as I could tell you, but the accounts are still remarkably meager. The fellows who could have told most about it didn't come back. The Germans have claimed that we had six thousand killed and as many taken prisoners. They left a battlefield such as had never been seen before in warfare, ancient or modern, and one that has had no compeer in the whole war except on the Russian front.

"What the Germans expected to accomplish by it I am not sure. Presumably they intended to win the war, and they might conceivably have won it then and there if they had foreseen the tremendous effect of the attack. It is certain that they expected no immediate retaliation, as they had provided no protection for their own men. They made a clear and unobstructed gap in the lines, which was only closed by the Canadians, who rallied on the left, and advanced in part through the gas-cloud itself.

"The method first used by the Germans, and retained ever since, is fairly simple, but requires great preparation beforehand. A hole is dug in the bottom of the trench close underneath the parapet, and a gas-cylinder is buried in the hole. It is an ordinary cylinder, like that used for oxygen or hydrogen. It is then covered first with a quilt of moss, containing potassium carbonate solution, and then with sand-bags. When the attack is to be made the sand-bags and protecting cover are taken off the cylinder, and each cylinder is connected with a lead pipe which is bent over the top of the parapet. A sand-bag is laid on the nozzle to prevent the back 'kick' of the outrushing gas from throwing the pipe back into the trench. Our own methods are practically identical with those first used by the Germans."

THE CLOUD GAS ATTACK

The gas attack just described is known as the cloud gas attack, where an effort is made to release in a single cloud enough gas to seriously affect the enemy. Its success depended on a number of things, including very thorough preparation in advance. The attackers had to know the country, the way the trenches lay, and how the wind was blowing. A wind of more than twelve miles an hour made the gascloud spread rapidly, and an upward current of air made it less effective. The weight of the gas was important in carrying it along, for it mixed rapidly with air to form the moving "cloud." The time occupied by a gas attack was too short to permit the gas to escape out of the original mixture.

The gas attack had to be planned very carefully. If the trench-line was very irregular the gas might flow into a portion of one's own trenches. The direction in which the wind was blow-

ing and the direction of the lines of the trenches were both considered. most suitable type of country was where the ground sloped gently away from where the gas was being discharged. The Germans made one mistake in believing that hilly or wooded country would not do. But the French made a successful gas attack in the hilly and wooded country in the Vosges, as later admitted in a captured German report. If the country was flat like that about Ypres and the wind direction was right, it was easy to make an attack, especially if the enemy did not know anything about it. To surprise the enemy was important.

German gas attacks were made by two regiments of pioneers, their officers including engineers, meteorologists, and chemists. They brought their first cylinders into the line without the Allies knowing anything about it, except from the deserter's report, which was not believed. The element of surprise was greatly lessened when the Allies began to know what to look for and to recognize the sounds in preparation of a gas attack.

The first attack was made with chlorin. If a gas attack is to be made with gas-clouds, the number of gases is limited. The gas must be easily compressible, easily made in large quantities, and should be much heavier than air. If the gas must be very poisonous and deadly, there are only two gases (chlorin and phosgen) to choose from. Pure chlorin was not all that was required, as it is easily absorbed. Many men in the first attack saved themselves by burying their faces in the earth or by stuffing their mufflers in their mouths and wrapping them around their faces.

GAS-MASKS

While later in the war the gas-mask became well known, the first protection

was simple. In response to an appeal by Kitchener, the women in England made respirators of pads of cotton-wool wrapped in muslin and soaked in solutions of sodium carbonate and thiosulphate; sometimes they were soaked



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Germans During a Gas Attack on the Western Front

This photo was received in this country from Germany by the way of Holland. The German soldiers are placing carrier-pigeons in an apparatus that acts as a gasmask for these birds.

only in water. A new type appeared almost every week. One simple type consisted of a pad of cotton waste wrapped up in muslin, together with a separate wad of cotton waste. These were kept in boxes in the trenches, and on the word "gas" six or eight men

would make a dive for the box, stuff some waste into their mouths, then fasten on the pad and stuff the waste into the space around the nose and mouth. But this got unpopular after a while when it was discovered that the same bits of waste were not always used by the same men. During the early part of 1915 this was the only protection used.

Then came the helmet made of a flannel bag soaked in thiosulphate and carbonate, with a mica window in it. A form of this helmet with different chemicals was long used in the British army as a reserve protection. It was put over the head and tucked into the jacket, and was foul-proof as long as well tucked down. This was good protection against chlorin.

There was a long search for materials that would absorb phosgen, as there are few substances that will. The successful suggestion came from Russia, and the substance was called bexamethylenetetramine (úrotropine). Used with sodium phenate it protected against phosgen. Air was exhaled through a valve in the helmet. It was found that there was a great difference in ease of breathing and comfort if a valve was placed in the mask. The helmet was put on over the head, grasped with the left hand around the neck and tucked into the jacket. This form was long used in reserve.

NEW GASES AND NEW PROTECTION

It was not long after the first and earliest type of protection that the British army got word through its Intelligence Department of a striking kind. It consisted of notes of some very secret lectures given in Germany to a number of the senior officers. These lectures gave in detail materials to be used, and one of them was phosgen. As a protection against it, the British

used a helmet soaked with sodium phenate, when the next attack came in Flanders, on the 19th of December. This attack was the beginning of efforts to make chemical warfare more effective and deadly.

There were three ways of doing this: First, to increase the concentration of gas so that it would penetrate any protection used; second, to surprise the enemy by making an attack so suddenly and silently that they had no time to make use of their protection; third, to use unexpected and new materials against which old methods of protection were useless.

The first gas attack, in April, 1915, lasted about one and a half hours. An attack in May lasted three hours. The attack in December was over in thirty minutes. Thus, to be effective, in the last attack the gas was just three times stronger than that used in the first, and six times that obtained in May. Other cloud gas attacks followed, and the time was made shorter; the last attacks lasted only ten to fifteen minutes. The number of cylinders containing gas was increased.

HOW A GAS ATTACK SURPRISED THE TROOPS

The troops were surprised in attacks by night. The best two hours were the hour between sunset and dark and the hour between dawn and sunrise. Gas attacks were often made, therefore, just in the gloaming or early morning, between lights. This took away one of the easy methods of spotting gas, that of seeing it, and it was necessary to depend upon the hissing noises made by the escaping gas and upon the sense of smell.

Another surprise was in sending out more than one cloud in an attack. After the first cloud the men would think it was all over, but ten minutes or half an hour later there would come another cloud on exactly the same front. This was very successful in at least one case near Hulluch in 1916. Some of the troops discarded their helmets after

prise by silencing the gas. Another method was to mix the gas up with smoke, or to use first gas, then smoke, so that it would be hard to tell where the gas began and the smoke ended.



"How the Gas Devil Comes"

Before the invention of the different kinds of gas-masks the mortality from gas was very high. In the last years of the war no such scene as this (1915) would take place; the men then donned their gas-masks at the first cry of "gas."

the first wave and were caught on the second, which was very much stronger than the first.

Efforts were also made to cause sur-

The last cloud attack made on the British was in August, 1916. After that time the Germans used gas three times on the Western front against the French,

and also used it against the Italians and the Russians, but it was practically given up against the British.

SHELLS CONTAINING GAS

It was not long before both the Germans and the Allies saw the advantage of making a gas attack in some other form than that of a cloud. The next step of gas offence was shells filled with the deadly stuff projected from guns and mortars far back of the front line of trenches, making it necessary for all as far back as the artillery positions to be protected by gas-masks. It was found that protection by a fabric could not be depended upon.

A box type of respirator was next used. In this the poisonous gas and air was inhaled through a box filled with materials, such as charcoal, which absorbed the gas out of the air. These boxes had to be sufficiently large and elaborate to protect against any gas, and the masks had to be light and comfortable. If the mask was not comfortable it became so unbearable that the soldier tore it off and was gassed just as if he had no mask on. If it was too heavy it was hard for the soldiers to carry. Oxygen apparatus would have been ideal, but it was too heavy and its protection lasted only two hours. The box respirator as finally developed and used in the British and American armies weighed scarcely three pounds, and had a life of twelve hours against gases.

In the gas-shell were used many different chemicals that could not be sent as clouds, and for this reason the gasshell quickly became the most important of all methods of using chemicals on the Western front.

The Germans started using shells soon after the first cloud attack. They began with the celebrated "tear" shells. These make the eyes water severely. These shells had little effect on the

British, but one attack on the French, accompanied by a very heavy bombardment with "tear" shells, put them out badly. The eyes of the men were affected, and many of the men were even made unconscious by the gas and were taken prisoner.

The first big experience with shells was an attack at Vermelles. The Germans put down a heavy barrage of these shells and made an infantry attack. The gas went through the helmets, and the attack might have been successful, but certain roads were not cut off sufficiently, so that reinforcements got up. When the Germans started using highly poisonous shells, which was at the Somme in 1916, they did not make the gas strong enough, although enormous numbers of shells were used. The substance used was trichloromethyl-chloroformate, but not in great strength.

CYLINDER ATTACK

The gas-shell, however, could carry only a limited amount of chemical. For this reason large cylinders came into use, and by the time the armistice was signed a cylinder attack was of common occurrence. Cylinders could be readily made; for example, a pipe could be taken, cut the right length, filled with chemical and an explosive to burst the cylinder placed at the end; when shot from a Stokes mortar, this crude projectile would carry over one thousand yards. The quantity of gas that could be sent in a single shell was small; a cylinder contained about seven times as much gas.

As the war went on special cylinders were used, and sometimes many tons of gas were put into the air at the same instant by the electric discharge of thousands of mortars containing cylinders. In this way, with careful aim and strong chemicals, the poisons penetrated the German mask.

The use of gas out of a projectile, whether shell or cylinder, was better than its use in a gas-cloud. it was not so dependent on the wind. Again, it did not require the elaborate preparation necessary for the cloud. Third, the targets were picked with all the accuracy of artillery fire. Fourth, the gas-shells succeeded with targets which gas-clouds could not reach. Take, for instance, a field-howitzer, dug into a pit, with overhead cover for the men, who went in from behind the gun. The men were safe from splinters, and only a direct hit would put the gun out of action. the gas would go in where the shell would not. It was certain to gas some of the men inside the emplacement. The crew of the gun had to go on firing with gas-masks on and with fewer men in the crew. Thus it nearly put the gun out of commission, reduced the number of shots, and often silenced the gun entirely. Another example was that of a position on a hillside with dugouts at the back, just over the crest, or with a sunken road behind the slope. The dugouts gave absolute protection. The French tried three times to take such a position after preparation with high explosives, and each assault failed. Then they tried gas-shells, and succeeded. The gas flowed rapidly into each dugout, especially if it had two or more doors.

OTHER POISONOUS SHELLS

Though "tear" shells were less depended upon, they were always a source of annoyance. For inscance, where large amounts of supplies and ammunition were being brought up there were always cross-roads where there was confusion and interference of traffic. A few gas-shells placed there made every man put on his mask, and if it was a dark night and the roads were muddy

there was great confusion. It was thus possible to "neutralize" a part of the infantry by cutting down their supplies and ammunition. The use of a gasshell, by forcing a man to put on his mask, could make him less efficient. If at the same time he could be hurt, so much the better. Hence there came a change in gas-shell tactics, which consisted in making the contents of shells poisonous.

One substance used for this method of annoying and seriously injuring, at the same time, was dichloro-diethylsulphid (mustard gas). Its age was begun in July of 1917, at Ypres, and it was largely used again at Nieuport and Armentières. A heavy bombardment of mustard-gas shells was put on these towns, as many as fifty thousand shells being fired in one night. Mustard gas had a smell rather like garlic than mustard. It had no immediate effect on the eyes, beyond a slight irritation. After several hours the eyes began to swell and inflame, and practically blister, causing intense pain, the nose discharged freely, and severe coughing and even vomiting ensued. Direct contact with the spray caused severe blistering of the skin, and the concentrated vapor penetrated through the clothing. The respirators, of course, did not protect against this blistering. The cases that went to the hospitals, however, were generally eve or lung cases, and blistering alone took back very few men. Many casualties were caused by the habit that some of the men fell into of letting the upper part of the mask hang down so as not to interfere with seeing. The Germans scored heavily in the use of this gas at first. It was another example of surprise in using a new substance that produced new and unusual symptoms in the victims.

Throughout the war there was no material brought out on either side that

always could be depended on to go through the other fellow's respirator. The casualties were due to surprise or to lack of training in the use of masks. The mask had to be put on and adjusted within six seconds, which required training, if it had to be done under field conditions.

TRAINING FOR A GAS ATTACK

The question of the training of troops was one of the most vital that had to be faced by the Allied armies. A defect in training was serious, if not more serious than a defect in a mask, for unless the masks were properly used they were of no more benefit than if not used at all. The training included not only donning the mask or respirator within the required number of seconds, but the general question of conduct throughout attacks. For example, the story is told that in February, 1918, the Germans made an attack on the Allies by means of projector cylinders, many of which, through bad aiming, fell into the German trenches as well as into the Allies'. The Germans were unable to go into their own front lines for two days, and in digging out one of the unexploded projectors the gasshell exploded, killing ten and wounding thirty German engineers, who were carrying on the digging-out operations.

During this attack the Allied soldiers closed up their gas-proof dugouts and were gassed by their own fires, which they kept going. This was an example of how anti-gas training demanded more than knowing how to put on a gas-mask. It emphasized the necessity for promptly extinguishing fires in

dugouts during a gas attack.

Again, early in March, an artillery position was shelled by mustard gas, and two shells burst in the door of the dugout, which was cleared by fire and then thought safe. Men who later slept in the dugouts became casualties. On another occasion, instead of clearing out by fire, chlorid of lime was used to neutralize the mustard gas, and there were no resulting casualties.

At another time the respirators were worn for two and a half hours. while the dangerous shell-holes were treated with chlorin of lime and filled with fresh earth. The men who had been exposed to the mustard gas were cleaned with soap-suds which were kept in the dugouts for that purpose. were no casualties.

There were many instances, particularly in the American Army, of men becoming casualties through taking the advice of some man who they thought had had experience with gas, rather than obeying orders and waiting for a command from their own officers. As a result of this it was necessary in all training to impress upon men that gasdisciplinary measures must be obeyed, and that carelessness, ignorance, or faulty advice on the part of any one not directly responsible for anti-gas measures was no excuse. Instances were found where the enemy had sent over men during a gas attack for the purpose of ordering American troops to take off their masks.

The importance of gas training and anti-gas methods was so great that there were schools of training in gas defense in all armies. American troops were trained in this country and again abroad, before they were permitted to go near the lines within the reach of gas-shells. The courses of study included the training of gas officers, training of instructors, training of selected non-commissioned officers, and the general training of troops.

WEARING THE RESPIRATOR .

One of the principal elements of the training was practice in spreading what

was called the gas alarm. The second important element was the adjustment of respirators, and the third was drill when wearing the respirator. A gasmask was not a comfortable thing to wear. The small eye-pieces which were inserted in the fabric of the mask made it hard to see. The nose was clipped shut so that breathing could take place only through the mouth, and the air, in being drawn in through the box or the respirator, had to be sucked with enough force to overcome the resistance offered by the chemicals in the box or Therefore the wearing of the respirator required forced breathing at all times, and was in itself exercise. To carry on any active operations such as firing artillery, marching, digging, or carrying supplies while wearing respirators, was very difficult, and there had to be frequent stops made for rest. This was one of the reasons why gas was such an effective weapon. It forced men to put on their respirators and thereby slow down operations. It was necessary to teach men what they could do while wearing the respirator. ignorant they would undertake too much, become so exhausted from lack of air as to tear off the mask to enable them to breathe more easily, and would immediately become casualties. Therefore all soldiers had to learn by experience how much they could exercise while wearing the respirator.

THE EFFECTS OF GAS

The last and most distressing part of gas warfare was the effect which the gases had on those who were subjected to them. The following story of what happened to trees and plants gives an idea of what happened to the human body when attacked by poisonous chemicals: "In the Champagne region, certain varieties of pine-trees were burned or reddened. . . . At Bailleul, situated

some five miles from the fighting-line, the hothouses belonging to M. Cordonnier suffered not a little from the effects of such gases during the month of April, and this was especially noticed in the case of grape-vines, which were already in a fair stage of growth. Here the leaves were not reddened, but covered with white or discolored spots, and afterward they turned brown and fell off."

Few of the gases killed instantly. Many attacked the lungs, which gradually filled with liquids and so drowned a man from the inside. Those that attacked the eyes usually had no lasting effect. In a few days or weeks, generally, a man's eyes were as good as ever. Other gases, like mustard, actually burned the body wherever they touched. The burns were very painful, like all acid or chemical burns. Several gases were delayed in their effects, and usually exercise made them worse.

In general, chemical warfare was horrible in its effects. Toward the end of the war most of the shells fired on either side were gas-shells, and the limit was the ability of each country to produce the gas and fill the shell.

Had the war gone into 1919 the United States would have used the vast quantity of gas which was made here, and the Germans would have regretted their introduction of this inhuman method of warfare. The prevailing winds blew toward Germany, and most of the raw materials for gas manufacture lay outside of Germany.

The gas-mask developed in the United States was the best in the world. The Americans made from cocoanut shells, peach and apricot pits, and similar materials, a charcoal that absorbed more gas more quickly than any other, and as a result the American mask was the best that had been made up to the end of the war.

CANARIES AS GAS-DETECTORS

How These Little Pets Are Used in the Most Dangerous Kind of Warfare

WITH almost every company of engineers in the trenches could be found a most valuable assistant, a canary. Not, as you might suppose, to wile away the hours when the men were back of the lines, but to perform a necessary service as a gas-detector. Coal-miners were the first to make use of the canary to detect the presence of gas in the tunnels, for the little birds feel the effect of the gas before human beings, and they indicate the peril in time for the miners to take the necessary precautions to save themselves.

Here is what an Englishman writes to the Providence Journal about their

work for the cause.

JUST ASK THE TUNNELERS!

"Ask the tunnelers of the Royal Engineers—those human moles whose greatest joy in life is 'blowing the Boche'—and they will tell you that the canary has been an invaluable ally in underground warfare.

"The trench canary does not flutter in a gilded cage or sing in the scanty sunshine of La Belle France. You will have to climb down a mine-shaft or two and scramble through tiny, dark galleries to make his acquaintance.

"He is usually to be found in a small wooden cage ensconced with several others of his tribe in a cozy dugout far beyond the reach of the heaviest howitzers.

"One does not hear much singing in the trench canaries' dugout. They are most of them too busy recovering from gas attacks.

"It is not cruelty. The canary is

just 'doing his bit,' the same as every one else.

BOBBIE, THE CANARY HERO

"Bobbie is the veteran of the canaries in one part of the line. If he were a man he would have many medal ribbons 'up.' He is 'some' bird, is Bobbie! He has been gassed seven times.

"Surely the gas doesn't come so far underground as this?" you question.

""We don't mean the chlorin which they squirt out of cylinders on the surface," says an engineer officer, who is willing to explain to you. 'That's a picnic in these days of gas-masks! Besides, you can see it coming rolling along before the wind, and it gives you lots of time. Our gas, known technically as carbon monoxid, is invisible and has no smell. If you happen to get into it—for a few seconds only—it's all up.'

"But if you can't smell it and can't see it, how do you know it's there?"

"That's where the canary comes in," says the officer. 'When a mine is exploded, whether by Fritz or ourselves, gas is given off. It may find its way into our galleries or it may not. You have your anti-gas apparatus all ready, and grab Bobbie's cage or that of any other canary in whom you have confidence. You keep the cage well in front of you and high up, and push on, watching Bobbie as you would a rival for a lady's affections. Bobbie knows what to do-you can trust him. He sniffs like a dog on a strange scent. If there's gas, down goes the canary flat on his back, toes up in the air."



The Tribute



WHEN THE NATIONS SING

National and Patriotic Songs—When They Were Written and Who Wrote Them

NATIONAL ANTHEMS

THE STAR-SPANGLED BAN-NER," the national anthem of the United States, was written by Francis Scott Key, son of John Ross Key, an officer in the Revolutionary army. In 1814 the British, after burning Washington, advanced toward Baltimore and met, on the way, a body of American soldiers. After fierce fighting the British captured a number of their opponents, and took them, prisoners, to their fleet, which was then making ready to attack Fort McHenry. Among those captured was a friend of Mr. Key's, and he started out in a sail-boat to beg for his release. He reached the admiral's flagship when the bombardment began, and was forced to remain there during all of the shelling, which lasted twenty-five hours. At last, seeing our flag still flying, in a burst of patriotic inspiration he wrote on the back of an envelope the words of "The Star-Spangled Banner." It was published soon after in the Baltimore Patriot, and won instant popularity.

THE STAR-SPANGLED BANNER

Oh, say, can you see by the dawn's early light

What so proudly we hailed at the twilight's last gleaming,

Whose broad stripes and bright stars, through the perilous night

O'er the ramparts we watched were so gallantly streaming?

And the rockets' red glare, the bombs bursting in air,

Gave proof through the night that our flag was still there.



From a painting by Peale

Francis Scott Key

Author of "The Star-Spangled Banner."

Oh, say, does the Star-Spangled Banner yet wave

O'er the land of the free and the home of the brave?

On the shore dimly seen, through the mist of the deep,

Where the foe's haughty host in dread silence reposes,

What is that which the breeze, o'er the towering steep,

As it fitfully blows, half conceals, half discloses?

Now it catches the gleam of the morning's first beam,

In full glory reflected, now shines in the stream.

'Tis the Star-Spangled Banner. Oh, long may it wave

O'er the land of the free and the home of the brave!

And where is the band who so vauntingly swore,

'Mid the havoc of war and the battle's confusion,

A home and a country they'd leave us no more?

Their blood has washed out their foul footsteps' pollution.

No refuge could save the hireling and slave From the terror of flight or the gloom of the grave,

And the Star-Spangled Banner in triumph shall wave

O'er the land of the free and the home of the brave!

Oh, thus be it ever where freemen shall stand Between their loved home and the war's desolation,

Blessed with victory and peace, may the Heaven-rescued band

Praise the Power that hath made and preserved us a nation.

Then conquer we must, when our cause it is just,

And let this be our motto: "In God is our trust."

And the Star-Spangled Banner in triumph shall wave

O'er the land of the free and the home of the brave.

When our land is illumined with Liberty's smile.

If a foe from within strike a blow at her glory,

Down, down with the traitor that dares to defile

The flag of her stars and the page of her story!

By the millions unchained who our birthright have gained

We will keep her bright blazon forever unstained—

And the Star-Spangled Banner in triumph shall wave

O'er the land of the free and the home of the brave.

Great Britain's national hymn, "God Save the King," which has been the inspiration and pattern for so many national anthems, has been the subject of many disputes regarding its author. It is generally conceded by now, however, to have been written by Henry Carey, who wrote both words and music and sang them at a dinner in 1740, celebrating the taking of Portobello by Admiral Vernon, November 30, 1739.

GOD SAVE THE KING

God save our gracious King,
Long live our noble King,
God save the King.
Send him victorious,
Happy and glorious,
Long to reign over us:
God save the King!

O Lord our God arise!
Scatter our enemies,
And make them fall!
Confound their politics,
Frustrate their knavish tricks;
On Thee our hopes we fix:
God save us all.

Thy choicest gifts in store
On him be pleased to pour.
Long may he reign;
May he defend our laws,
And ever give us cause
To sing with heart and voice,
God save the King!

"The Marseillaise," that incomparable battle-song, was written by Rouget de Lisle in 1792. He was at the time a young officer stationed at Strassburg, and, dining one night at the home of the mayor, he was requested to write something for the volunteers who were about to leave. That night he composed the music and stirring words in

a fever of enthusiasm. It was sung a few days later at a civic dinner in Marseilles, where the revolutionists were mobilizing, and was received with great acclaim. It was immediately printed and distributed among the troops, who sang it when they marched into Paris to storm the Tuileries. The Parisians took it up in delight and named it in honor of the volunteers who brought it there. It was decreed the national anthem of France in 1795.

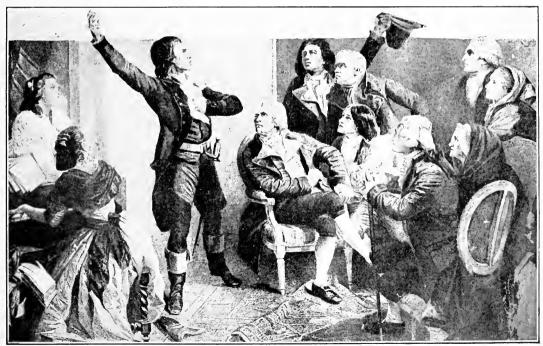
THE MARSEILLAISE

Arise, ye children of the nation,
The day of g ory now is here!
See the hosts of dark oppression
Their blood-stained banners rear,
Their blood-stained banners rear!
Do ye not heed? Roaring the tyrants go,
Scattering homes and peace;
Our sons, our comrades face the foe,
The wounds of war increase.

To arms! ye warriors all! Your bold battalions call! March on, ye free! Death shall be ours, Or glorious liberty!

Within the tomb ourselves must enter,
Where all our oldest are at rest.
We shall find their dust reposing,
Trace the virtues each possessed,
Trace the virtues each possessed!
Then, then shall we, jealous of honor, yet
Shrink not to share their grave,
For pride, o'ercoming vain regret,
Avenges still the brave!
To arms! ye warriors all! etc.

Belgium acquired her national anthem during her struggles with Holland for independence in 1830. The words were written by Louis Dechez Jenneval, who was killed in action near Antwerp. The music was composed by François van Campenhout, a distinguished musician.



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"The Marseillaise" Sung Again at Strassburg

It was here that, on the night of April 25, 1702, Rouget de Lisle, who was then an officer in the engineers, composed the song which was later destined to become the national anthem of France.

LA BRABAÇONNE

The years of slavery are past,

The Belgian rejoices once more;
Courage restores to him at last

The rights he held of yore!
Strong and firm his clasp will be,

Keeping the ancient flag unfurled,

To fling its message on the watchful world,
For King, for right, for liberty!

For thee, dear country, cherished motherland.

Our songs and our valor we give;
Never from thee our hearts are banned,
For thee alone we live!
And thy years shall glorious be,
Circled in unity's embrace,
Thy sons shall cherish thee in every place,

For King, for right, for liberty!

As a result of hearing England's national anthem, Czar Nicholas I commanded Gen. Alexis Lwoff, a member of the suite that accompanied him on his travels, to write something that would equal or surpass "God Save the King." The general, who was a fine musician, set to work on the musical accompaniment to some words by Joukovsky, and in 1833 produced the stately anthem of Imperial Russia. The Czar was so delighted that he presented Lwoff with a gold snuff-box set with diamonds, and ordered that the words "God save the Czar" be introduced into the armorial bearings of the composer's family.

BOSHE ZARIA CHRANI!

God save our noble Czar!
Great be his glory!
Growing in power and majesty,
Czar! May good fortune be
Showered on thee;
God save thee still
Our noble Czar!

Concerning the Japanese national hymn very little information can be

gathered. At the beginning of the tenth century the Emperor Daigo commanded a collection of poems to be compiled under the name of Kokinshu; this included the "Kimigayo," but the author is unknown; nor is the composer known, but the music seems to have been written much later, about fifty years ago.

KIMIGAYO

May our Sovereign Lord remain Rooted for a thousand years and then again:

Until rocks, vast and solemn, rise from stone,

Until moss never more is thickly grown!

Serbia has a large number of stirring patriotic songs. Her national anthem was written in 1872, the words by the poet J. Gjorzjevic, and the melody by Davorin Jenko.

SRPSKA NARODNA HIMNA

God, Who in bygones has saved us, Thy people,

Great King of Justice, hear us this day: While for our country, for Serbia's salvation,

We with devotion unceasingly pray.
Onward! Onward lead us forever,
Out of shadow into light,
Till our ship of state be anchored
Through the mercy of Thy might;
Till our foes be spent and scattered
In the fullness of the light,
Serbia's King and Serbia's land

Guard for evermore!

Through lack of political unity the Italians had no national anthem until the stormy period about 1858, when the following verses of Luigi Mercantini were set to music by the military band-master Allessio Olivieri, and sung by the Alpine Chasseurs Brigade. Its great popularity dates from 1860, since

when it has been known as the "Garibaldi Hymn."

when Rumania had been raised to a kingdom.

GARIBALDI HYMN

Come, arm ye! Come, arm ye! From vineyards of olives, from grapemantled bowers,

Where landscapes are laughing in mazes of flowers;

From mountains all lighted by sapphire and amber,

From cities of marble, from temples and marts,

Arise, all ye valiants, your manhood proclaiming,

Whilst thunders are meeting, and sabers are flaming,

For honor, for glory the bugles are sounding,

To quicken your pulses and gladden your hearts.

Then hurl our fierce foemen far from us forever,

The Day is dawning, the Day is dawning which shall be our own!

Too long cruel tyrants have trampled us under,

The chains they have forged us are riven asunder;

The scions of Italy rise in defiance,

Her flag nobly flutters where breezes are kind;

To landward and seaward, the foe shall be broken,

Where Heroes have gathered, where Martyrs have spoken,

And Italy's throne shall be rooted in Freedom,

Whilst Monarch and people are all of one mind.

Then hurl our fierce foemen, etc.

Rumania acquired her national hymn about the same time as Italy. It was the prize-winning composition written by Eduard A. Hubsch in 1861 in a competition for a fanfare to welcome Prince Alexander Johannes Cusa. The words were written later by Vasil Alexandri,

NATIONAL HYMN OF RUMANIA

Long be thy reign, O King!
Loudly thy praise we sing;
Thou to our land shall bring
Honor, peace, and glory!
May our Lord bless thy sword,
Bring aid to all!
Strive with might for the right,
Ne'er may'st thou fall!
Lord God, oh, hear us!
Be Thou still near us!
Fail Thou Rumania never,
Guard her crown forever!

Portugal is the only state whose national anthem was composed, music and words, by one of its kings. It was received, indirectly, from Brazil. In 1822 Dom Pedro IV had assumed the title of Prince Regent and Protector of the Brazilian Constitution. To increase his popularity he composed the patriotic song, "O Patria, O Rei, O Povo," which, on his ascension to the Portuguese throne in 1826, he brought with him.

O PATRIA, O REI, O POVO

All ye who love our nation,

For the faith put forth your might!
Be it ever your inspiration,
The law divine all hearts to unite!
The law divine all hearts to unite!

CHORUS:

Lead us onward, holy banner!
Guide us ever, immortal faith!
Every man will follow proudly
On the way to victory or death!
On the way to victory or death!

Oh, in lofty exultation

Let us all unite to-day,
One endeavor, one inspiration,
Shall be ours forever and aye!

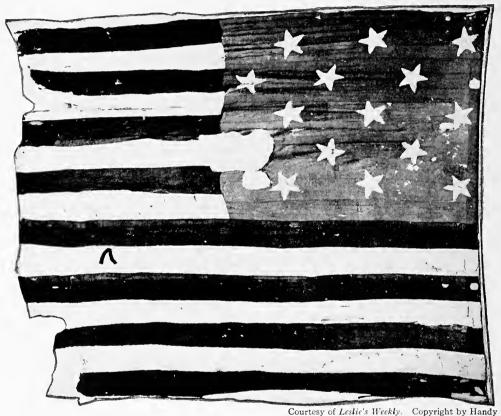
CHORUS.

"The Maple Leaf Forever," Canada's national anthem, was composed in 1871 by Alexander Muir.

THE MAPLE LEAF FOREVER

In days of yore, from Britain's shore, Wolfe, the dauntless hero, came, And planted firm Britannia's flag On Canada's fair domain At Queenston Heights and Lundy's Lane
Our brave fathers, side by side,
For freedom, home, and loved ones dear,
Firmly stood and nobly died;
And those dear rights which they maintained
We swear to yield them never!
Our watchword evermore shall be
The Maple Leaf forever.

CHORUS.



The Original Star-Spangled Banner

During the British attack on Baltimore in 1814, this flag flew from the ramparts of Fort McHenry and inspired Francis Scott Key, who was detained on board a British ship, to write the song which has become the anthem of the United States.

Here may it wave, our boast, our pride, And joined in love together, The Thistle, Shamrock, Rose entwine, The Maple Leaf forever!

CHORUS:

The Maple Leaf, our emblem dear, The Maple Leaf forever, God save our King, and Heaven bless The Maple Leaf forever. The Welsh national anthem refers to the siege of Harlech Castle in 1468 by the Earl of Pembroke.

MARCH OF THE MEN OF HARLECH

Men of Harlech in the hollow, Do ye hear like rushing billow, Wave on wave that sweeping follow Battle's distant sound? 'Tis the tramp of Saxon foemen, Saxon spearmen, Saxon bowmen, Be they knights or hinds or yeomen,

They shall bite the ground. Loose the folds asunder, Flag we conquer under!

The placid sky, now bright on high, Shall launch its bolts in thunder!
Onward! 'tis our country needs us!
He is bravest, he who leads us!
Honor's self now proudly heads!
Freedom, God, and Right!

Scotland's inspiring "Scots Wha Hae" has an old tune whose name is "Hev Tutti Taittie." The words were written by Robert Burns in 1793. In a letter the poet speaks of it as follows: "There is a tradition which I have met with in many places in Scotland that it was Robert Bruce's march at the battle of Bannockburn. This thought in my solitary wanderings warmed me to a pitch of enthusiasm on the theme of liberty and independence, which I threw into a kind of Scottish ode, fitted to the air, that one might suppose to be the gallant royal Scot's address to his heroic followers on that eventful day. So may God defend the cause of truth and liberty as He did that day! Amen."

SCOTS WHA HAE WI WALLACE BLED!

Scots wha hae wi Wallace bled!
Scots wham Bruce has aften led,
Welcome to your gory bed,
On to victory!
Now's the day, and now's the hour,
See the front of battle lour;
See approach proud Edward's power,
Chains and slavery!

Wha would be a traitor knave?
Wha would fill a coward's grave?
Wha sae base as be a slave?
Let him turn and flee!
Wha, for Scotland's king and law,
Freedom's sword would strongly draw,
Freeman stand and freeman fa',
Let him on wi' me!

"Jeszcze Polska," the Polish national anthem, was especially popular with the Polish legionaries in the struggle for liberation from the Russian yoke in 1830–31. The words are by Wybitski, and the music by Oginski.

JESZCZE POLSKA

Poland's not dead yet in slavery, She shall reign in splendor, What she lost her children's bravery Once again will render.

CHORUS:

On, on, ye legions, Where the battle rages, Poland shall again be free, Firmly crush all tyranny!



Courtesy of Association Men

The Star-Spangled Banner

Every man in the company was detailed for instruction in singing the national anthem taught by the Army Association Music Director Bushgen at Camp Gordon.

Polish blood e'en now is flowing,
And our swords are flashing.
Bonaparte we'll soon be overthrowing
With a deadly thrashing.

Chorus.

It is said that Haydn, on a visit to London, was so impressed by "God Save the King" that he determined to write a song like it for Austria. His composition was first sung at the National Theater in 1797, where it was at once received with greatest enthusiasm, and soon after was adopted as the national anthem.

NATIONAL HYMN OF AUSTRIA

God preserve our noble Emperor,
Franz, our Emperor, good and great,
Mighty ruler, high in wisdom,
We his glory celebrate!
Love shall twine him laurel garlands,
They become his regal state!
God preserve our noble Emperor,
Franz, our Emperor, good and great.

To array himself in virtue
Ever was his constant care,
Only to defend his people
Doth his sword flame high in air.
In their blessings thus rewarded,
He finds all his pleasure there.
God preserve our noble Emperor,
Franz, our Emperor, good and great.

The former national hymn of Germany, "Where Is the German Fatherland," has been superseded by "The Watch on the Rhine." The latter was composed by Carl Wilhelm in 1854, but its real popularity dates from the Franco-Prussian War in 1870–71.

THE WATCH ON THE RHINE

A roar like thunder strikes the ear, Like clang of arms or breakers near, Rush forward for the German Rhine! Who shields our dear beloved Rhine? Dear Fatherland, thou needst not fear, The Watch, the Rhineland Watch, stands firmly here!

A hundred thousand hearts beat high, The flash darts forth from every eye, For Teutons brave, inured by toil, Protect their country's holy soil. Dear Fatherland, etc.

PATRIOTIC SONGS

"America," which is sung to the air of "God Save the King," was written by Samuel Smith, and was first sung at the Park Street Church in Boston on July 4, 1832.

AMERICA

My country, 'tis of thee,
Sweet land of liberty,
Of thee I sing;
Land where my fathers died,
Land of the Pilgrims' pride,
From every mountain-side
Let freedom ring.

My native country thee,
Land of the noble free,
Thy name I love;
I love thy rocks and rills,
Thy woods and templed hills,
My heart with rapture thrills
Like that above.

Let music swell the breeze
And ring from all the trees
Sweet freedom's song;
Let mortal tongues awake,
Let all that breathe partake,
Let rocks their silence break,
The sound prolong.

Our fathers' God, to Thee,
Author of liberty,
To Thee we sing.
Long may our land be bright
With freedom's holy light:
Protect us by Thy might,
Great God, our King.

Arne composed the air to the famous "Rule Britannia" when he was preparing his masque of "Alfred." The words were written by Thompson and Mallet. The masque was performed at Cliefden House, Maidenhaud, the residence of Frederick, Prince of Wales, August 1, 1740, to commemorate the

accession of George I and the birthday of Princess Augusta.

RULE BRITANNIA

When Britain first, at Heaven's command,
Arose from out the azure main,
Arose from out the azure main,
This was the charter, the charter of the land,
And guardian angels sing this strain:
Rule Britannia! Britannia, rule the waves,
Britons never will be slaves!

LE CHANT DU DÉPART

Victory now chants her hymn, o'erthrown is every barrier,

And Liberty guides us on our way; While from North to the South the trumpet tells every warrior,

At last has dawned the vengeful day. Ye enemies of France, now tremble, With crime and pride, drunken all. The sovereign people now assemble, And you in the tomb soon will fall.



Gurkha Pipers Playing "The Marseillaise"

The nations not so blessed as thee
Must in their turn to tyrants fall,
Must in their turn to tyrants fall,
While thou shalt flourish, shalt flourish great
and free,

The dread and envy of them all. Rule Britannia! Britannia, rule the waves, Britons never will be slaves!

The French "Chant du Départ" is almost as dear to the people as their beloved "Marseillaise."

CHORUS:

Our dear country bids us defend her, Now our victory or death is nigh, To live for her is every Frenchman's duty, For her 'tis his duty to die.

From your fond mother's eyes you'll see no tears o'erflowing,

Far from us be coward griefs and fears, 'Tis for us to rejoice that our sons now are going,

It is the foe who should shed tears.

'Tis true that we gave you existence, Your life is no longer your own, Your days now belong to your country, And she is your mother alone.

CHORUS.

"The Campbells Are Coming" is rich in association, and one is instantly reminded of the agonizing days at Lucknow, where the little garrison, which



"The Campbells Are Coming"

A poster used with great effect in the early days of the war to bring the brave Scots to the colors.

was so heroically holding out against the infuriated natives, was told of approaching help by the sound of the bagpipes playing the famous Scotch song.

THE CAMPBELLS ARE COMING

The Campbells are coming, Oho, Oho! The Campbells are coming, Oho, Oho!

The Campbells are coming to bonnie Lochleven.

The Campbells are coming, Oho, Oho!

Upon the Lomonds I lay, I lay, Upon the Lomonds I lay, I lay, I looked down to bonnie Lochleven, And saw three bonnie perches play.

The Campbells are coming, etc.

"The Wearing of the Green" is an anonymous street ballad that made its appearance during the Irish rebellion of 1798. It was strictly forbidden by the authorities, a restriction which has since been revoked.

THE WEARING OF THE GREEN

Oh, Paddy dear, and did ye hear the news that's going round?

The Shamrock is forbid by law to grow on Irish ground;

St. Patrick's day no more we'll keep, his color can't be seen,

For there's a cruel law ag'in' the wearing of the green.

I went with Napper Tandy and he took me by the hand,

And said he, "How's poor old Ireland, and how does she stand?"

She's the most distressful country that ever yet was seen,

They're hanging men and women there for the wearing of the green.

Serbia's long history of defensive warfare has given to her people a wealth of magnificent battle-songs. Many of them tell of the struggle against Turkish oppression.

Comrades, you know not The splendor of your blades! This war is not as other wars; The night shrinks with all her stars, And Freedom rides before you On the last of the Crusades!

Reverse the sword! The Crescent is rent asunder!

Lift up the hilt! Ride on with a sound of thunder!

Lift up the Cross! The cannon, the cannon are dumb!

The last Crusade rides into Byzantium!

The Englishman leaving for the front would consider it a frightful breach of good form to suggest that there was a possibility of his not returning. Not so the German. His songs are of the most mournful strain; he apparently has as much hope of life as a man between a stone wall and a firing-squad.

REITER'S MORGANLIED

Breaking day, breaking day
Lights me to my bed of clay.
Soon the trumpets will be blowing,
Soon my life-blood will be flowing,
Mine and many a comrade's brave.

Scarce begun, scarce begun, All my pleasant life is done. Yesterday on proud horse prancing, To-day the deadly bullet lancing, To-morrow in the narrow grave.

REITERLIED

The fearful night is round about,
We ride along, we ride and sigh,
To ruin riding out.
How coldly comes the morning up,
Good hostess, yet another cup
Before I die. before I die.

This green grass that so freshly grows,
My blood shall stain it till it lie
As red as any rose.
I raise this broken sword in hand,
And drink first to the Fatherland,
For which I die, for which I die.

WHEN THE SOLDIERS SING

Song of the Marching Line and the Trench

THE military authorities, realizing the great value of singing in keeping up the morale of the men, have done all they could to encourage the practice. Major-General Wood says, "It is just as essential for soldiers to know how to sing as it is for them to carry rifles and learn how to shoot them." And the soldiers themselves needed very little encouragement; it is one of the things they loved to do. But you never caught them singing their national anthems or formal patriotic songs. They liked best old favorites like "Home, Sweet Home" or "Annie Laurie," music-hall ditties, and all sorts of parodies of the most irrelevant kind.

Here are some of the songs that were most popular among the American soldiers:

K-K-K-KATY

K-k-k-Katy, beautiful Katy, You're the only g-g-g-girl that I adore, When the m-m-m-moon shines over the cowshed

I'll be waiting at the k-k-kitchen door.

SMILE, SMILE, SMILE

Pack up your troubles in your old kit-bag And smile, smile, smile! When you've a lucifer to light your fag Smile, boys, that's the style. What's the use of worrying? It never was worth while, so Pack up your troubles in your old kit-bag And smile, smile, smile!

A LONG, LONG TRAIL

Nights are growing very lonely,
Days are very long;
I'm a-growing weary only
Listening for your song.

Old remembrances are thronging Through my memory,

Till it seems the world is full of dreams, Just to call you back to me.

I'm glad to see you looking so fine. Ashes to ashes and dust to dust, If the Camels don't get you, the Fatimas must.



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The Singing Soldiers

There's a long, long trail a-winding Into the land of my dreams, Where the nightingales are singing And a white moon beams; There's a long, long night of waiting Until my dreams all come true, Till the day when I'll be going down That long, long trail with you.

KEEP THE HOME FIRES BURNING

Keep the home fires burning, While your hearts are yearning. Though your lads are far away, They dream of home; There's a silver lining Through the dark cloud shining. Turn the dark cloud inside out Till the boys come home.

MR. ZIP-ZIP-ZIP

Good morning, Mr. Zip-Zip-Zip, With your hair cut just as short as mine. Good morning, Mr. Zip-Zip-Zip,

Good morning, Mr. Zip-Zip-Zip, With your hair cut just as short as, Your hair cut just as short as, Your hair cut just as short as mine.

George Cohan, as usual, caught the spirit of the public in his classic "Over There," that aroused such a storm of enthusiasm.

OVER THERE

Johnny, get your gun, get your gun, get your gun,

Take it on the run, on the run, on the run. Hear them calling you and me,

Every son of liberty.

Hurry right away, no delay, go to-day. Make your daddy glad to have had such a lad.

Tell your sweetheart not to pine, To be proud her boy's in line.

Over there, Over there, Send the word, send the word over there That the Yanks are coming, The Yanks are coming,

The drums rum-tumming everywhere.
So prepare, say a prayer,
Send the word, send the word over there,
We'll be over, we're coming over,
And we won't come back till it's over, over
there!

Almost as popular is Irving Berlin's song, that is sung with such deep feeling.

OH, HOW I HATE TO GET UP IN THE MORNING

Oh, how I hate to get up in the morning. Oh, how I'd love to remain in bed. For the hardest blow of all Is to hear the bugle call You've got to get up, You've got to get up, You've got to get up this morning.

Some day I'm going to murder the bugler, Some day they're going to find him dead. I'll amputate his reveille, And step upon it heavily, And spend the rest of my life in bed.

Lieutenant Gitz-Rice wrote a soldier chorus to the music-hall favorite, "Hold Your Hand Out, Naughty Boy," that won instant favor.

KEEP YOUR HEAD DOWN, FRITZIE BOY

Keep your head down, Fritzie boy!
Keep your head down, Fritzie boy!
Last night in the clear moonlight
I saw you, I saw you.
You were mending your barbed wire
When we opened rapid fire.
If you want to see your father in the
fatherland
Keep your head down, Fritzie boy!

"Where Do We Go from Here, Boys?" is chiefly remarkable because of its complete lack of connection with the war.

WHERE DO WE GO FROM HERE, BOYS?

Where do we go from here, boys,
Where do we go from here?
Anywhere from Harlem to a Jersey City
pier.
When Pat would meet a pretty girl
He'd whisper in her ear,
Oh, joy! Oh, boy! Where do we go from
here?

The songs of the English soldier are even more paradoxical than those of our own boys. They abhor anything that resembles a serious view of the situation and those sturdy heroes' whole record shows only the most unflinching courage and daring delight in chorusing gaily:

Send out the rank and file,
Send out the brave Territorials,
They can easily run a mile,
Send out the boys' or the girls' brigade,
They will keep old England free,
Send out my mother, my sister, and my brother.

But for God's sake don't send me!

Send out the Army and the Navy,

And the mournful plaint:

Why did we join the Army, boys?
Why did we join the Army?
Why did we come to Salisbury Plain?
We must have been ruddy well balmy!
Fol de rol, etc.

"Good-by-ee" and "The Last Long Mile" are two more favorites of Tommy's.

THE LAST LONG MILE

They put us in the Army, and they handed us a pack,

They took away our nice new clothes, and dressed us up in khak,

They marched us twenty miles or more to fit us for the war;

We didn't mind the nineteen, but the last one made us sore.

Chorus:

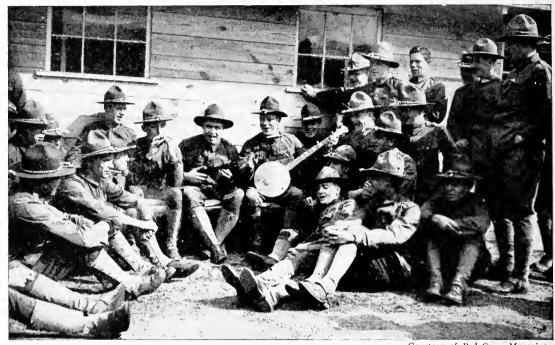
Oh, it's not the pack that you carry on your back,

Nor the gun upon your shoulder, Nor the five-inch crust of France's dirty dust, That makes you feel your limbs are growing older.

It's not the load on the hard straight road

Hymn tunes are frequently supplied with new words. "The Church's One Foundation" furnishes the air for this cheerful song:

> We are Fred Karno's army, A jolly fine lot are we; Fred Karno is our captain, Charlie Chaplin our O. C.



Courtesy of Red Cross Magazine

A Symphony in O. D. (Olive Drab)

"Music hath charms" we are told, and this enjoyable side of the soldiers' life was encouraged under, the leadership of well-known choristers.

That drives away your smile: If the socks of sister Raise a blister Blame it on the last long mile.

GOOD-BY-EE

Good-by-ee, don't cry-ee,
Wipe the tear, Baby dear, from your eye-ee,
Though it's hard to part, I know,
I'll be tickled to death to go.
Don't cry-ee, don't sigh-ee,
There's a silver lining in the sky-ee.

Bon soir, old thing, cheer-i-o chin-chin!
Napoo Toodle-oo, good-by-ee!

And when we get to Berlin
The Kaiser he will say:
"Hoch! Hoch! Mein Gott!
What a jolly fine lot
Are the 2—4th R. E. T."

And the aviators choose, appropriately enough, "I Want to Be an Angel" for the setting of one of their songs:

I want to be an airman bold,
To mingle with the stars,
To fly all weathers, hot and cold,
To be a son of Mars.

XI--22

I fear no Hun: no, far nor near, While my gun's mounted in the rear, And I've a Vickers by my side, To be my escort and my guide.

The poilu marches along to the swinging air of "La Madelon," or "Derrière Chez Mon Père."

LA MADELON

CHORUS:

When Madelon comes out to welcome us,
Her skirts are fluttering as she trips along,
And each one, in his especial way,
Has to sing his little song.
La Madelon with us is not severe;

When round her waist she finds a manly arm She only laughs, she's never learned to scold; Madelon can only charm.

DERRIÈRE CHEZ MON PÈRE

At home, about my father's house,
The laurel-trees are all in flower,
The singing-birds of all the world
Make their nests in that fair bower.
By the side of my darling
I am very glad to be;
By the side of my darling
Contented I shall stay.

When the first *repatriés* arrived at Evian, released from German slavery, the relief workers there were amazed to hear even the tiny children singing all sorts of songs against their oppressors that must have been composed, taught, and practised under the Germans' very noses. Here is a translation of one of them:

GUILLAUME EMPEREUR D'ALLEMAGNE

A haughty king of might and power
For many years had slyly planned
To sweep o'er Belgium's land and France,
And to conquer Russia and England.
He went to see that dear old man,
Emperor Francis, the Austrian—
And whispered to him: "What say you,

Let's get together, just we two! We've lots of guns And munitions, We've Zeppelins
And submarines.
High in the sky
Our bird-men fly.
We've boats galore
Along the shore.
We've all the troops we need;
We cannot but succeed.
Happy and gay,
We go our way.
We'll conquer Europe don't

We'll conquer Europe, don't you fear. We'll return

With money to burn.

Onward, old friend, to the frontier!"

The song continues to relate how everything seemed to go their way until they came to the Marne, where Papa Joffre told them it was time to turn around; how they vainly fought, and were at last escorted back to Berlin by a polite French army.

It is difficult to know yet what songs the German soldiers sang in the trenches. Here is the translation of one that was found in the diary of a Bavarian corporal near Verdun:

BAVARIAN DIGGING SONG

Come on, all you fellows, let each take his spade,

For the trench work that each must be plying;

An underground dugout must also be made
As a place for the Prussian to lie in:
Wherever the fighting is done under earth,
Bavarians are wanted, and have, too, their
worth.

The gallant Bavarians, this is their fate, At every one's pipe to be jigging; While the lazy-bone Prussian reposes in state, The Bavarian's delving and digging.

He's kept at it still with no chance of escape, For there must be commands and there must be red tape.

The Frenchman, he doth the Bavarian dread, He takes good care not to attack him, But seeing the skunk of a Prussian instead,

He's ready to go in and whack him; Out of the trenches the Prussian must clear— Why didn't they put the Bavarians there?

THE WONDERFUL DOGS OF WAR

How Man's Best Friend Among Animals Was Conscripted in Large Numbers for Various Kinds of Military Service

By Austin C. Lescarboura

Fall the animals engaged in the Great War-and there were many different kinds, ranging from the horse to the canary-bird in land warfare, and from the sea-gull to the sea-lion in naval warfare-the dog stands out from all the rest. While it is true that the horse, carrier-pigeon, canary-bird, donkey, camel, sea-gull, sea-lion, and other animals served well and faithfully, theirs was a simple service compared with that of our old friend the dog. In most instances the other animals served under relatively safe conditions; but the dog was called upon to do all kinds of dangerous service in No Man's Land, under the observation of a watchful enemy ever ready to shoot him. His was a real combatant service; and the long lists of dead and wounded dogs indicate only too well how dangerous has been the work of the dog in the great struggle.

ANCIENT WAR-DOGS

As in so many other things, there is nothing new about the use of dogs in war. Long ago—in fact, hundreds of years before the birth of Christ, dogs were used by warring armies. The Macedonians of ancient times used dogs for carrying their military messages. The dog was made to swallow the message, which was placed in a ball of meat. When the dog arrived at his destination he was killed in order that the message might be recovered and read. Dogs were also employed by the ancient Macedonians as scouts; for, moving ahead of the troops, the dogs gave

warning of the approach of the enemy. Again, dogs were employed to seek out such of the enemy as sought concealment in the woods and swamps.

Historians tell us of the large numbers of dogs employed by ancient armies, not only as watch-dogs or scouts, but also for actual combat. Large and powerful dogs were trained to attack the enemy, and in the close hand-to-hand fighting of those early times these dogs proved most troublesome to the enemy. Generally, the effect was to throw the enemy warriors into wild disorder; and the breaking up of the battle formation was a serious thing in those days.

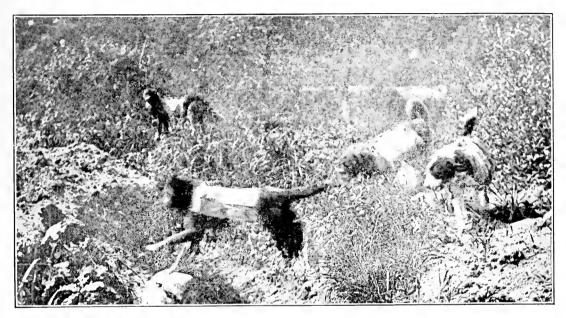
Coming down to more recent times, we find the dog playing an important part in the conquest of the New World. Columbus, for instance, had an army of two hundred infantrymen, twenty cavalrymen, and twenty dogs. Pizarro, in his conquest of Peru, was preceded by an advance-guard of dogs, of which Vasco Nuñez was the chief. The British, during the revolution of Jamaica, employed dogs known as buscadores, which means dogs that search the woods.

Napoleon, no doubt the greatest soldier the world has ever produced, did not believe in the use of dogs, although he never overlooked any detail making for greater military efficiency. However, when he went forth from European battlefields to other places in search of conquest, he came round to the use of dogs.

So there is nothing new in the use of

the dog in war. But never before were dogs used to the extent and for the range of service as in the recent struggle. The regimental dog, or mascot, has become the dog of war, regularly registered in the Army lists so as to be readily available in the event of need, and possessing a military record-card, iden-

sidered the most highly skilled and wellorganized military organization. For many years before the war certain French officers had trained and used dogs in the colonial wars of France, with excellent results. In many of the great military maneuvers, which France held at regular intervals in preparation



Training the French Dogs of War

The French-war dog was trained for special work. There were five classes: the sentinel-dogs, patrol, ambulance, despatch-bearers, and draught-dogs.

tification-tag, and complete equipment, just as a soldier, in some of the European armies. Indeed, the dog proved a most valuable aid in the leading military organizations, for sentry duty, carrying despatches, covering the flanks and front of infantry patrols, hauling and carrying supplies over No Man's Land to hard-pressed troops in the front-line trenches, as a guard over prisoners, and as a detective in running down spies and escaped prisoners.

DOGS THE FRIENDS OF THE POILUS

Let us start with the French Army, which in this war has come to be con-

for the great struggle with Germany which was always threatening to break out overnight, dogs were employed, particularly for the carrying of despatches. The dogs, however, were those trained by amateur dog-trainers, who offered them because they did not wish to see the Germans get ahead of the French, in this direction, at least.

THE GERMANS WERE READY

It remained for the Germans, nevertheless, to be ready with a full force of war-dogs, as with everything else. In the early days of the war the Germans used dogs on the Western and East-

ern fronts for sentry duty, carrying despatches, and accompanying patrols. Meanwhile the French, of all the Allied armies, possessed only six dogs of war, these being included in the forces of a battalion of Alpine Chasseurs, or mountain troops. These dogs, intended for despatch-carrying, served to good advantage; but they were soon killed off. Meanwhile the French introduced a large number of Red Cross dogs, for the purpose of bringing aid to the wounded lying out on the battlefields. For this purpose, however, the dogs did not prove much of a success, and by September, 1915, the French High Command decided to abandon the use of Red Cross dogs.

The Germans did good work with their war-dogs from the very beginning of the war. The French people became aware of the value of the dog in modern fighting through what they heard of the German war-dogs; and soon the people of France, as well as the French newspapers, were insisting on the building up of a vast dog force for their Army. Letters poured in from the troops fighting in the mountains of Alsace, telling how invaluable dogs would be in aiding troops which were none too numerous in the face of a powerful and well-equipped enemy.

ORGANIZING THE DOG ARMY

The first move was to secure the aid of amateur dog-trainers in organizing the Army kennels for the troops fighting in the Vosges Mountains. During December, 1914, an amateur dog-trainer started for the mountain front with a dozen dogs. Several weeks after, an Army officer offered to organize a kennel for his own Army, and General de Castelnau, in charge of an Army group, heartily indorsed the plan.

Somehow or other these two attempts were not successful, and the ever-

cautious French High Command was beginning to lose interest in the matter of dogs. Then another man came forward with a proposition to organize a dog service, addressing himself to General de Maud'huy. His offer was accepted, and in less than a month thereafter he left for the front, bringing with him fifteen professional dog-trainers who were either exempted from military service or included in the classes not vet called, as well as sixty or more dogs. By the end of July, 1915, when the war was just a year old, the dog-kennel of the Seventh French Army was in full operation and dogs were introduced at the front for various kinds of service. A short time thereafter the kennel of the Second French Army was in operation, and in a few months more several other kennels were estab-From these pioneer kennels there grew up the French service of war-dogs. On December 25, 1915, the dog-kennels received the recognition of the French War Ministry, being considered from that day on as part of the infantry.

TRAINING THE ARMY

Now this business of training dogs for war proved to be no easy matter. That is why so many of the men who tried it did not have much success. In the first place, it requires the right breed of dog, and then the services of the best dog-trainers. Endless patience is necessary.

The French found certain breeds best suited for war. These were French shepherd-dogs, Belgian shepherd-dogs, English shepherd-dogs and Scotch collies, Airedale terriers, and wolf-dogs, as well as some mixed breeds of any of these. Game-dogs, such as are used by hunters, did not prove trustworthy, for the reason that their instinct to set out after game proved

stronger than their training. When such dogs were sent with despatches or supplies they often forgot their duties and set out after a bird or other game. However, for certain duties, particularly sentry work, these dogs, too, came in for their share of glory.

For sentry duty, where the dog serves as an extra sentinel along with one or more soldiers, he must not only be in full possession of all his senses, but must be trained to use all of them in his work. With most sentry-dogs the sense of hearing appears to be the one most used in detecting the approach of enemies. Indeed, so sensitive is the sense of hearing of some species of dog, par-

Trained to attack the enemy, these dogs hurl themselves on the opposing soldiers and capture them in a none too gentle manner. For the carrying of despatches, the shepherd-dogs have been found the most suitable, while for hauling and carrying supplies all kinds of large and strong dogs have been employed. The practice has been to enlist all dogs in good health, and then put them through a regular course of training. Dogs found unsuited to the regular front-line duties, such as sentry work, carrying of despatches, actual combat, and so on, have been used for hauling and carrying supplies, so that in the long run only a very small num-



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Dog-drawn Machine Guns

These dogs were trained and kept in readiness by the Dutch Army during the war, for Holland often feared that she would be drawn into the conflict.

ticularly the shepherd-dogs, that at the least sound the ears are pointed toward the source of the sound waves and the animal then decides their nature.

Mastiffs and bulldogs serve best for patrol purposes and for combat work.

ber of the dogs taken into the service cannot be used.

A WAR-DOG'S LIFE

The war-dog's life is not a hard one, to be sure; for everything that can

make a dog happy is provided for him. Not only that, but the war-dog receives the very best of medical care. During the war there was a Franco-American society known as the Blue Cross, which took care of all animals engaged in military operations.

After being taken into the military service, the dog is trained little by little. In order that he may be of real value to the soldiers, it is necessary to make him obey all commands without hesitation, yet retain all his natural instincts and senses. The exercises are graduated from the simplest to the most difficult. The dog is taught to follow his master, sit down, lie down, to be absolutely motionless at any spot, to return at the first call, no matter where he may be, and so on. He is broken in to all kinds of sounds, especially rifle and revolver shooting. At intervals he is tried out by placing him on sentry duty and noting how soon he detects the approach of a stranger. His sense of direction, so to speak, is also determined, as well as his sense of smell.

A war-dog is never whipped. That is not the right way to train him. Instead, he is handled with kindness, and good work is continually being rewarded with extra meals and other things which delight any dog. And when he must be punished the trainer resorts to scolding, making him lie motionless for a long time, chaining him to a post, and depriving him of his recreation.

At the end of each stage in the dog's training the trainer makes a note of the progress in the dog's own military record. If the dog develops any particular inclination toward one branch of service, a note is made to that effect. When the training is completed the dog graduates, and goes to the dog-camp at Satory, near Versailles, for a sort of finishing-off course. Here the dog gets his real war training. A new course of

intense training is entered into, to the accompaniment of all the noises and smoke and terrors of warfare, produced for the dog's own benefit, of course. During the war new explosives and missiles were tried out at Satory, and it was an easy matter to imitate the conditions at the front in so far as noise is concerned.

The finishing-off course requires anywhere from two weeks to a month or even six weeks, depending on the ability of the dog. The military dog's diploma is in the form of the stamp of the school of Satory to the effect that he is ready for service. As calls come from the various French armies for trained dogs, these are sent to the kennels of the armies in question.

Toward the end of the fighting the French fighting forces maintained dog-kennels near the front, and the dogs were brought in touch with the poilus who were to be their masters. One poilu, or French infantryman, was assigned to a dog, and if both of them knew their business thoroughly, they soon became a perfect team and inseparable comrades.

While the dogs were being prepared for actual combat service and front-line duties, other dogs were trained for the transport service. As a rapid means of bringing up supplies over the roughest ground the dogs were found to be second to none. Two dogs can readily haul four hundred pounds, and one dog can carry on his back some thirty pounds if it is properly packed and held in place. Little two-wheeled carts equipped with bicycle tires have long been used by the French and Belgian forces for carrying supplies, officers and soldiers, and machine guns.

AIREDALES FROM ENGLAND

The British have also organized an efficient service of war-dogs. It was

Major Richardson of the Colonial forces of Great Britain who offered his services early in the war, for the purpose of training dogs for the British in France and elsewhere; but as in the case of the French Army, the major was left more or less to his own resources, not receiving official support. Yet the major

kennels to learn what was to be learned. His request was granted, and he visited the entire French dog organization at the training centers and at the front. Some time later a British commission also went over the same ground, returning to England with a clear idea of how to organize and train a war-dog force,



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Training the French Dogs of War

They were trained to obey the slightest motion of the hand of their owner.

was persistent; he kept right on training dogs for the dog force, and by September, 1914, he turned over to the First British Army in France 124 Airedale terriers, ready for sentinel duty.

However, the dogs were placed in inexperienced hands at the front. In a short time they lost all the benefits of their training, and they became more of a menace than a help. Learning of the success of the war-dogs in the French Army in Alsace, Major Richard son asked the British War Office permission to organize a commission for the purpose of going to the French and with full realization of the value of such a force.

Major Richardson was made the chief of the dog service in England. Behind the British front in France was established the central dog-kennel, where the dogs received their preliminary training. The finishing-off course took place in the actual trenches, at the hands of expert trainers. Major Alec Waley was placed in charge of the dog service in France.

The British Army, unlike the French, did not employ dogs for sentry duty. Their dog service was for despatch-

carrying, liaison, and light transport. But the British and French dog services were always ready to help each other, and on more than one occasion food, and even dogs, were borrowed when conditions demanded it.

The Belgian Army had a dog service when the war began. Indeed, dogs have always been used in Belgium for hauling small carts and milk and vegetable wagons in particular, during the days of peace; and with the outbreak of war Belgian machine guns mounted on rubber-tired wheels and drawn by dogs played an important part in delaying the German advance. But when it came to the other services, such as sentry duty, liaison, and so on, the Belgians were no better prepared than their allies. However, in due course a kennel was organized in France and dogs were trained for various duties with the Belgian forces along the famous Yser River.

The Italian Army had a dog force similar to that of the French. But for the most part the dogs were employed for hauling light wagons and sleds in the mountains rather than for the other duties of the full-fledged war-dog.

The German Army was ready with its dog service as in almost everything else. Germany, having thought, dreamed, talked, and acted war for years before 1914, was naturally prepared with wardogs ready to take the field. As far back as 1895 the German Army officially introduced dogs among its forces, particularly with the mountain troops and some Prussian Guard divisions. man troops engaged in colonial campaigns were always accompanied by dogs. And in order to pave the way for a big force of war-dogs, the German High Command encouraged dog-fanciers to breed suitable dogs for the purpose. With typical German thoroughness these fanciers and dog clubs kept secret records of all the dogs available for war service, together with their characteristics, breed, training, and so on.

When the German armies started pouring through Belgium and France in August, 1914, they had a full force of trained dogs. In fact, they had some six thousand dogs in all, for use on the Western and Eastern fronts. while there were other dogs in reserve. in various processes of training and recruiting. Like the French, the Germans also had Red Cross dogs for rendering service to the wounded. Dogs, and more dogs, and still more dogs the Germans were after for their dog service; and wherever they passed they selected the best dogs for their Army. So it was in Belgium and Northern France, and most likely in Russia and Serbia. An intense propaganda was carried on in Germany and Austria for the purpose of getting every one to aid the dog service by furnishing trained dogs. Dogs were bought in Holland and later in Switzerland; but since the dogs were intended for military service, both those countries soon put a stop to the sale of dogs to Germans.

It was at Trepow, near Berlin, that the German Army maintained its large dog-kennel for the preliminary military training. At other points were installed kennels where further training took place, and from which the dogs graduated to the kennels of the various armies in the field. Expert trainers were found for all the kennels, because Germany had long made use of numerous dogs in the police work of various cities.

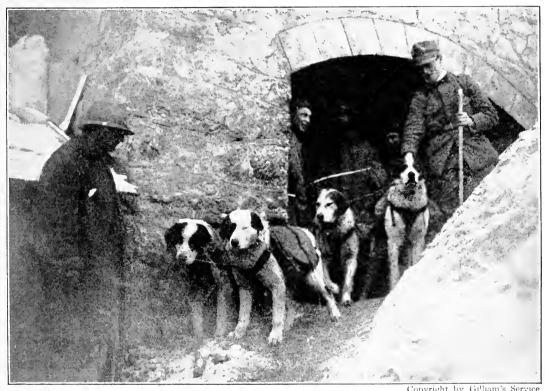
As trench warfare became more and more complicated and deadly, the dogs were trained accordingly. Thus dogs were trained to wear gas-masks; and, gas or no gas, they carried out their duties without hitch. With the growing intensity of artillery bombardments, the dogs had to be trained to run through heavy barrages. This they did without faltering; in fact, one of the regular

duties of the dog force of various armies was to carry food, ammunition, and other supplies to small bodies of soldiers isolated in some trench elements up front. The dogs were provided with regular kits holding hot food, bread, and other things to eat, or hand grenades, machine-gun ammunition, or even small shells.

So well trained were the sentry-dogs that they could not resist attacking any one wearing the enemy uniform. Thus

further pains to confirm his suspicions, made a dash for the postman. Prisoners in the "cages" or inclosures behind the Allied front often tried to make friends with French watch-dogs, but they were always unsuccessful because they wore the green-gray of the German Army—the one color which these dogs had been taught to detest.

During the year 1917 over 5,000 French war-dogs were treated for wounds and ailments, of which number 4,196



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Italian Military Despatch-Dogs Awaiting their turn to be sent on duty in the Alps.

in the case of a German sentry-dog brought back by some American troops as their mascot, everything went well until the dog espied a mail-carrier in New York City. Now, mail-carriers wear a blue-gray uniform similar in color to that of the French soldier. And this German dog, without taking were returned fit for duty at the front. The most skilled dog specialists in France were engaged in caring for the thousands of war-dogs, and the same may be said of all the other large armies. The French had 10,000 dogs in the service, and this figure holds true for the British and German forces as well.

SHERLOCK NOBODY HOLMES¹

By Percy K. Fitzhugh

WHEN Archibald Archer, steward's boy on the Atlantic liner Warrington, offered to get Tom Slade a job on board the ship, Tom was highly elated and could hardly wait for Saturday to come. Saturday was the day on which Archer's shore leave expired.

"I'm sick and tired of fooling around here and helping the Home Defencers," Tom had said to his friend. "If I was

eighteen I'd enlist—''

"Why don't you say you're eighteen?" said Archer. "They'd never know the diff. Lots of fellows have got in by saying they're older than they really are."

"I promised my Scoutmaster I wouldn't try to enlist until I'm eighteen," said Tom, sulkily. "You can bet I won't wait a day over that, though! I want to get somewhere where there's a chance of some adventure."

"Well, I don't know what you call

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adventure," said Archer, "but if they take you aboard the *Warrington* you stand a good chance of being torpedoed, if that 'll satisfy you."

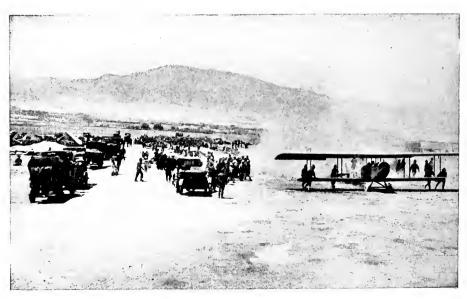
This was beyond Tom's wildest

dreams.

So on Saturday they went to the city together and walked along the water-front until they came to the dock where the *Warrington* lay.

The steamship company, aided and abetted by Uncle Sam, had enshrouded the whole prosy business of loading and sailing with a delightful covering of romance, and Tom Slade realized, as he and young Archer approached the sacred precincts, that the departure of a vessel to-day is quite as much fraught with perilous and adventurous possibilities as was the sailing of a Spanish galleon in the good old days of yore.

A high board fence protected the pier from public gaze, and as Tom read the



The Aeros That Carried General Pershing's Mail

glaring recruiting posters which decorated it he felt that, even if he wasn't old enough to enlist, he was at last about to do something worth while—something which would involve the risk of his life.

By a little door in the big fence sat a man on a stool. Two other men near

him eyed the boys shrewdly.

"First barbed-wire entanglement," said Archer, as they approached. "Keep your mouth shut, but if you *have* to answer any questions tell 'em the truth. They're spotters."

"What?" said Tom, a little uneasy.

"Secret Service men—they can tell if your great-grandfather was German."

"He wasn't," said Tom.

"Hello, old spiff-head!" called Archer to the gatekeeper, setting down his satchel with an air of having done the same thing before. The Secret Service men opened it and rumaged its contents, one helping himself to an apple.

"You bloomin' grafter," said Archi-

bald.

"That's all right, Archie," said the other man, likewise helping himself. "Who's your friend?"

"He's goin' in to see the steward," said Archer. "I told him I'd get a

feller for the butcher—"

"All the passes are taken up," said the gateman, as he took Archer's pass. "Everybody's on board and there's nobody needed."

"Oh, is that so?" said Archer, derisively. "Just because everybody's on board it don't prove nobody's needed."

"He'll only come back out again,"

said the gatekeeper.

"Oh, will he?" said Archer, ironically.
"Let him in," laughed one of the
Secret Service men, and as he spoke
he pulled Tom's pockets inside out in
a very perfunctory way and slapped his
clothing here and there. It was evident that young Archer was a favorite.
Tom felt very important.

"Didn't I tell you I was lucky?" Archer said, as he and Tom lugged the big valise down the pier. "But they're getting more careful all the time. Next sailing, maybe, when we're taking troops over, President Wilson himself couldn't get by with it."

Tom had never been in close proximity to an ocean steamer, even in peace-times, and the scene which now confronted him was full of interest. Along the side of the pier rose the great black bulk of the mighty ship. Up and down the steel gangways hurried men in uniform. Several soldiers in khaki strolled back and forth. Hanging from a mammoth crane was part of the framework of a great airplane. the pier were several Red Cross ambulances and a big pile of stretchers; tremendous spools, fifteen feet or more in diameter, wound with barbed wire; heavy canvas-covered wagons lettered U. S. A. packed with poles and rolls of khaki-colored canvas; automobiles bearing the same initials, and shovels by the thousands, all similarly marked. There was no doubt that Uncle Sam was getting his sleeves rolled up for business.

At the foot of one of the gangways Archer had to open his bag again to gratify the curiosity of another man who, upon Archer's statement of Tom's errand, slapped Tom here and there in the vicinity of his pockets and said, "All right."

Archer led the way along the deck, down a companionway, and through a passage with doors marked "Surgeon," "Chief Steward," "Chief Engineer," "First Mate," etc. They entered the chief steward's cabin, where a man in uniform sat at a desk, with other men standing all about, apparently awaiting orders. When his turn came, Archer said:

"Do you remember, Mr. Cressey, you said you wished you had more

youngsters like me in the steward's department? I got you one here. He's a friend of mine. He's just like me—only different. Tom Slade, his name is, and he wants a job. He'd like to be chief engineer, but if he can't be that—"

"Maybe he'd be willing to be butcher's assistant," concluded the steward. "Archer," he added, as he reached for one of several speaking-tubes near his desk, "if I thought you'd sink I'd have you thrown overboard. How'd you en-

iov your visit home?"

A brief talk with some unseen person, to which Tom listened with chill misgivings, and the steward directed his young subordinate to take Tom to the purser's office and, if he got through all right there, to the ship's butcher. He gave Tom a slip of paper to hand to the purser.

It was to the third purser that Tom told the history of his life—so far as he knew it; where he was born and when, who his parents were, where they had been born, when and where they had died; whether Tom had ever worked on a ship, whether he had any relatives born or living in Germany or Austria, whether he had ever been employed by a German, and so on and so on.

All this went down in the big book, in which Tom had a page all to himself, and the last question left a chill upon him as he followed his young companion from the cabin—Whom to notify in case of accident.

"Accident," he thought. "That means

torpedoing.'

But against this was the glad news that for the round trip of presumably a month he would receive one hundred and sixty dollars, forty dollars payable on arrival in a "foreign port," the balance "on return to an American port."

There would be no call upon this stupendous sum, save what he chose to spend in the mysterious, unknown for-

eign port, and Tom felt like the regular story-book hero who goes away under a cloud and comes back loaded with wealth and glory.

The butcher's domain was a long way below-decks. The butcher himself was a genial soul, who took Tom in hand

without any ceremony.

"Now I'll take you down," said he, after preliminaries, "and show you the store-rooms and refrigerators."

An iron ladder led down from the butcher's apartment to a dark passage, where he turned on an electric light.

"Now, these three doors," he said, "are to the three store-rooms—one,

two, three."

Tom followed him into one of the rooms. It was large, delightfully cool, and immaculately clean. All around were rows of shelves with screen doors before them, and here were stored canned goods—thousands upon thousands of cans, Tom would have said.

"You won't touch anything in here," his superior told him. "None of this will be used before the return trip—maybe not then. Come in here."

Tom followed him through a passage from this room into another exactly like it. Along the passage were great ice-box doors. "Cold storage," his superior observed.

"Now here's where you'll get your stuff. It's all alphabetical; if you want tomatoes, go to T; if you want salmon—S. Just like a dictionary. If I send you down for thirty pounds of salmon, that doesn't mean thirty cans—see?"

"Yes, sir," said Tom.

"Make up your thirty pounds of the biggest cans—a twenty and a ten. There's your opener," he added, pointing to a rather complicated mechanical can-opener fastened to the bulkhead. "Open everything before you bring it up."

"Yes, sir."

He led Tom from one place to an-

other, initiating him into the use of the chopping-machine, the slicing-machine, etc. "You won't find things very heavy this trip," he said, "but next trip we'll be feeding five thousand, maybe. Now's the time to go to school and learn. Here's the keys; you must always keep these places locked," he added, as he himself locked one of the doors for Tom. "They were just left open while they were being stocked. Now we'll go up."

That very night, when the great city was asleep, two tug-boats, like a pair of sturdy little Davids, sidled up to the great steel Goliath and slowly she moved out into midstream and turned her towering prow toward where the Goddess of Liberty held aloft her beckoning light in the vast darkness.

And Tom Slade was off upon his adventures.

Indeed, the first one had already occurred. He and Archer, having received intimations that the vessel might sail that night, had remained up to enjoy her stealthy nocturnal departure. They were leaning over the rail, watching the maneuvering of the tugs, when suddenly a man, carrying a suit-case, came running along the deck.

"We're not sailing, are we?" he asked, excitedly, as he passed.

"Looks that way," said Archer.

"Where's the gangway? Down that way?" the man asked, not waiting for an answer.

"He'll have a good big jump to the gangway," said Archer. "I guess he was asleep at the switch, hey? What d'you say we go down—just for the fun of it?"

At the opening where the gangway had been, several men, including the excited passenger, were gathered. The rail had been drawn across the space and the ship was already a dozen feet or so from the wharf. Tom and Archer paused in the background, wisely inconspicuous.

"Certainly you can't go ashore. How are you going to get ashore—jump?" asked an officer.

"You can have the gangway put up," insisted the man.

"You're talking nonsense," said the officer. "Can't you see we're out of reach and moving?"

"You'd only have to back her in a yard or two," said the man, excitedly.

"What, the ship?" asked the officer in good-natured surprise, and several other men laughed.

"There's no use my starting without my apparatus!" said the passenger, his anger mounting. "It will be here tomorrow morning; it is promised! I was informed the ship would not sail before to-morrow night. This is an outrage—"

"I'm sorry, sir," said the officer, patiently. "The wharf closed this afternoon; notice was posted, sir."

"I saw no notice!" thundered the man. "It's of no use for me to go without my belongings, I tell you! I demand to be put ashore!"

By this time the vessel was in midstream, and his tirade was growing rather wearisome. Most of the bystanders sauntered away, laughing, and the two boys, seeing that nothing sensational was likely to happen, returned to the forward part of the ship.

"Do you think he was a German?" said Tom.

"No, sure he wasn't. Didn't you hear what good English he talked?"

"Yes, but he said 'ah-par-ah-toos,'" said Tom, "instead of apparatus. And he was sorry he said it, too, because the next time he said belongings."

"You make me laugh," said Archer.

"There's another thing that makes me think he's a German," said Tom, indifferent to Archer's skepticism.

"What's that?"

"He wanted the ship brought back just on his account."

Bucking the brisk morning breeze and holding on to his peaked service cap, Tom made his way along the deck next morning, bent on his new duties.

The door of the wireless-room was open as he passed and the young operator was sitting back, with the receivers on his ears, and his feet on the instrument-shelf, eating a sandwich.

"H'lo, kiddo!" said he.

Tom paused and looked about the cozy, shipshape little room with its big coil and its splendid, powerful instrument.

"Do you live in here?" he asked.

"Nope," said the operator, "but I'm doing both shifts and I s'pose I'll have to sleep right here with the claps on this trip."

"Isn't there another operator?" Tom

asked.

"Yup—but he didn't show up."

Tom hesitated, not sure whether he ought to venture further in familiar discourse with this fortunate and important young man, whom he envied.

"The man at the gate said everybody was on board," he finally observed; "he said all the passes were taken up."

The operator shrugged indifferently. "I don't know anything about that," said he.

"I got a wireless set of my own," Tom ventured. "It's just a small one —for Boy Scouts. It hasn't got much sending-power."

"He used to be a Boy Scout," said the operator, pleasantly. "That's where

he first picked it up."

"The other operator?"

"Yup."

"I learned some myself," said Tom.

The operator did not seem inclined to talk more and Tom went on along the deck, where a few early risers were sauntering back and forth enjoying the fresh morning breeze. He noticed that life-preservers were laid across the rail, loosely tied, and piled at intervals along the deck, loosely tied also.

He ate his breakfast with the deck stewards and their boys and then went down into his own domains, where, according to instructions, he took from a certain meat-book a memorandum of what he was to bring up from below.

Descending the dark companionway, he turned on the electric light and stood puzzled for a moment, paper in hand.

"That's just exactly like me," he

said. "I got to admit it."

The fact was that, despite his tour of initiation under the butcher's guidance, he was puzzled to know which of the two doors opened into the room from which supplies for the voyage were to be drawn. At a hazard he opened one.

Sliding open one of the screen doors, he stooped and lifted out a couple of cans from a lower shelf. As he did so he heard a familiar ticking sound which was pretty sure to accompany the stooping posture with him, and which always notified him that his big, trusty nickel watch was dangling on its nickel chain.

But it was not dangling this time, and Tom paused in surprise, for the ticking continued quite audibly and apparently very close to him. He took out his watch and was surprised to find that its sound was quite distinct from another and slower ticking somewhere nearby.

He looked about for a clock, but

could see none.

Then, of a sudden, he lifted several more cans from the shelf and knelt down, holding his ear close to the space. From somewhere behind the cans came the steady tick, tick, tick, tick, tick . . .

For a moment he knelt there in surprise. Then hurriedly he lifted out can after can until there lay revealed upon the shelf a long, dark object. The ticking was louder now.

He touched the object gingerly and found that it was held fast in place by a wire which ran from a screw in the shelf to another screw in the bulkhead above it, and was thus effectually prevented from moving with the rolling of the ship.

Something prompted Tom to step quickly through the passage to make sure that he had entered the right room.

Then he discovered his mistake.

The room he had entered was the store-room from which no supplies were to be taken on the present trip.

He turned back and knelt again.

Tick, tick, tick, tick . . .

What did it mean? What should he do?

His next impulse was to run upstairs and report what he had discovered. He did not dare touch the thing again.

Then he realized that something—something terrible—might happen while he was gone. Something might happen in five minutes—the next minute—the next second!

He watched the thing in a sort of fascination.

Tick, tick, tick—it went, on its steady grim journey toward—

Toward what?

Still Tom did not budge. As though

hypnotized, he watched.

Tick, tick, tick, tick, tick—it went; heedless, cheerful, like a clock on a mantelpiece.

And still Tom Slade remained just where he was, stark-still and trembling.

Then, of a sudden, Tom Slade, ship's boy, disappeared, and there in his place was Tom Slade, Scout.

He cautiously removed the encircling wire, lifted the object out with both hands, finding it surprisingly heavy, and laid it carefully upon a table.

Tick, tick, tick, tick—it went cheerfully along on its tragic errand.

It appeared to consist of a piece of ordinary stovepipe about twelve inches long. The face and works of an alarmclock, being of a slightly smaller circumference, had been placed within one end of the pipe, the face out, and the intervening space around this was packed with cotton waste. The other end of the pipe was closed with a kind of gummy cement.

Tom observed that the little alarmdial in the clock's face was set for nine o'clock, which afforded him infinite re-

lief, for it was not yet seven.

With the greatest of care and hands trembling a little, he pulled out some of the cotton waste around the clock face, holding the dial steady with one hand, and found that nothing save this packing was holding the clock in place. He joggled it very gently this way and that to make sure that it was not connected with anything behind. Then he lifted it out and put it on a shelf.

Tick, tick, tick, tick—it went just as before, as if not in the least disappointed that its tragic purpose had been

thwarted.

There was no Gold Cross for this little act of Tom's and no "loud plaudits," as his chum Pee-wee would have said, but Tom Slade had saved a couple of hundred lives just the same.

It occurred to him now that pretty soon he would be expected upstairs. The hands of the clock pointed to a quarter of six, but Tom's own watch, which was honest, plain, and reliable as he himself, said twelve minutes of seven.

"That's funny," said he.

He peered into the space which the removal of the clock had left in the pipe's end. Four or five inches deep, it appeared to be sealed with the same gummy substance as at the other end. On the inside of the pipe was a roughlooking, yellowish area about two inches square, and from this two black, heavy cords ran to the cement wall.

Tom understood at once the mechanism of the horrible thing. The bell of the alarm-clock had been removed and the clock so placed that at the fatal tick the striker would vibrate against this rough area, which was probably inflammable like a match-end and which, on being ignited, would have ignited the fuse. Tom's imagination traced the hurrying little flames racing along those cords, and he shuddered. His lip curled a little as he looked from the now harmless piece of junk to the impenitent clock which was ticking merrily on.

"Huh! I don't call that fighting,"

he said.

Tom's knowledge of war was confined to what he had learned at school. He knew about the battle of Bunker Hill and that ripping old fight, the battle of Lexington. These two encounters represented what he understood war to be.

"That ain't fighting," he repeated. Methodically, he went upstairs to his

ultimate superior.

"I got somethin' to tell you, Mr. Cressey," he said, hurriedly. "I made a mistake and went into the wrong room, and there's a bomb there. It was set for nine o'clock. I fixed it so's it can't go off."

"What?" ejaculated the steward.

"I fixed it so it can't go off," Tom repeated, dully. "If I'd waited till I told you it might 'a' gone off by mistake."

His manner was so entirely free from excitement that for a moment the steward could only stare at him.

"There ain't any danger now," said

Tom.

The steward whistled to himself

thoughtfully.

"Go down there and wait till I come, and don't say anything about this to anybody," said he.

Tom went down, feeling quite important; he was being drawn head and shoulders into the war now. Once the thought occurred to him that perhaps he would be suspected of something.

In a few minutes the steward came down with the captain and the first officer and a man in civilian's clothes. who carried a cigar in the corner of his mouth, and who Tom thought must be of the Secret Service.

"Confirms your suspicions, eh?" said the captain to the man in plain clothes, after a gingerly inspection of the omi-

nous piece of stovepipe.

"Hmmm!" said the other man. "Yes, no doubt of it. Wish I'd taken him up last trip when he sent that message. We'll have a job finding him now."

"I don't see how he could have got ashore since nine o'clock last night,"

said the first officer.

"Well, he did, anyway," said the Secret Service man; "they're getting by every day and they will until we have martial law along the water-front. You see, this is where he had to come through to his locker," he added, look-

ing about.

The captain gave a brief order to the first officer to have the vessel searched at once for more bombs. The officer hurried away, and presently came back again. The Secret Service man was intently examining the floor, the jamb around the door, and the casing of the port-hole. The captain, too, scrutinized the place as if he hoped it might yield some valuable information; and Tom, feeling very awkward, stood silently watching them.

"Here you are," said the Secret Service man, indicating a brown stain

on the door-jamb.

The other three men stepped over to the spot, but Tom did not dare to join them.

"There you are, Captain," said the Secret Service man; "see that fingermark? The skin lines aren't as clear, see? That's from constant pressure. That's the finger he uses to press his wireless key."

"Hmm!" said the captain.

"It was a lucky mistake this boy made," said the first officer, glancing not unkindly at Tom.

XI-23

"Hmmm!" said the captain.

Tom did not know whether to take this for praise or not. He stood silent but very thoughtful. None of his four superiors took the trouble to acknowledge his act, nor even to address him, and he had to piece together as best he could, from their conversation, the reasons for their suspicions of the missing operator.

The Secret Service man was very self-confident and very convincing. Tom could not help envying and admiring

him from his obscure corner.

"I'll send a wireless right away," said the captain, as the four moved toward the door.

As they reached the door Tom spoke, his voice shaking a little, but in the slow, almost expressionless way which was characteristic of him.

"If you'd wait a minute, I got some-

thing to say," he said.

"Yes, sir," said the first officer, not unpleasantly. The captain paused impatiently. The Secret Service man smiled a little.

"I heard this morning," said Tom, "that the other operator—the one that isn't here—that he used to be a Boy Scout. I'm a Scout and so I know what kind of fellers Scouts are. They ain't traitors or anything like that. Something happened to me lately, so I know how easy it is to get misjudged. If he was a Scout then he wasn't a German, even if he might have had a German name, 'cause Germans stay by themselves and don't join in, kind of—"

The captain made a move as if to go. "But that ain't what I wanted to

say," said Tom.

The captain paused. There was something about Tom's blunt, plain speech and slow manner which amused the first officer and he listened with rather more patience than the others.

"There was a man tried to get off the ship last night," said Tom. "He—" "Oh yes, that was Doctor Curry, from Ohio," laughed the first officer, indulgently. "I hunted him up on the purser's list—he's all right. He flew off the handle because his baggage didn't come. He's all right, boy."

"The man that started the English Scouts," said Tom, undaunted, "says if you want to find out if a person is foreign, you got to get him mad. Even if he talks good English, when he gets excited he'll say some words funny."

The captain turned upon his heel.

"But that ain't what I was going to say, either," said Tom, dully. "Anybody that knows anything about wireless work knows that operators have to have exactly the right time. That's the first thing they learn—that their watches have got to be exactly right—even to the second. I know, 'cause I studied wireless and I read the correspondence catalogues."

"Well?" encouraged the Secret Ser-

vice man.

But it was pretty hard to hurry Tom. "The person that put the bomb there," said he, "probably started it going and set it after he got it fixed on the shelf; and he's most likely set it by his own watch. You can see that clock is over an hour slow. I was wonderin' how anybody's watch would be an hour slow, but if that Doctor Curry came from Ohio maybe he forgot to set his watch ahead in Cleveland. I know you have to do that when you come east, 'cause I heard a man say so."

A dead silence prevailed, save for the subdued whistling of the Secret Service man as he scratched his head and eyed

Tom sharply.

"How old are you, anyway?" said he. "Seventeen," said Tom. "I helped a feller and I got misjudged," he added, irrelevantly. "A Scout is a brother to every other Scout—all over the world. 'Specially now when England and France are such close partners of ours, like. So

I'm a brother to that wireless operator, if he used to be a Scout. Maybe I got no right to ask you to do anything, but maybe you'd find out if that man's watch is an hour slow. Maybe you'd be willing to do that before you send a wireless."

The captain looked full at Tom, with a quizzical, shrewd look. He saw now, what he had not taken the trouble to notice before, a boy with a big mouth, a shock of rebellious hair, a ridiculously ill-fitting jacket, and a peaked cap set askew. Instinctively Tom pulled off his cap.

"What's your name?" said the cap-

"Tom Slade," he answered, nervously arranging his long arms in the trouble-some starched sleeves. "In the troop I—used to belong to," he ventured to add, "they called me Sherlock Nobody Holmes, the fellers did, because I was interested in deduction and things like that."

For a moment the captain looked at him sternly. Then the Secret Service man, still whistling with a strangely significant whistle, stepped over to Tom.

"Put your cap on," said he, "front-ways like that; now come along with me and we'll see if Doctor Curry, from Ohio, can accommodate us with the time."

When that flippant youth Archibald Archer beheld Tom Slade hurrying along the promenade-deck under the attentive convoy of one of Uncle Sam's sleuths, he was seized with a sudden fear that his protégé was being arrested as a spy.

The Federal detective was small and agile, with a familiar, humorous way about him. He had a fashion of using his cigar as a sort of confidential companion, working it from one corner of his mouth to the other, and poking it up almost perpendicularly as he talked. Tom liked him at once, but he did not

know whether or not to take literally all that he said.

"Conne is my name—Carleton Conne. Sounds like a detective in a story, don't it? My great-great-grandfather's mother-in-law on my sister's side was German. I'm trying to live it down."

"What?" said Tom.

Mr. Conne screwed his cigar over to the corner of his mouth and looked at Tom with a funny look.

"We want to meet the doctor before he has a chance to change his watch," said Mr. Conne, soberly. "If he set that thing a little after nine last night (and he couldn't have set it before) he was probably too busy thinking of getting off the ship to think of much else. He ought to be just coming out of his state-room by now. We must see him before he sees a clock. You get me?"

"Yes, sir," said Tom, a little anxious, but I might be wrong, after all."

"Maybe," said Mr. Conne. "There are three things we'll have to judge by. There's his trying to get off the ship last night, and there's the question of how his watch stands, and there's the question of how he acts when we talk with him. See?"

"Yes, sir."

"Since you're a detective, remember this," Mr. Conne added, goodhumoredly, "it's part of the A-B-C business. Three middle-sized clues are better than one big one—if they hang together. Six little ones aren't as good as three middle-sized ones, because sometimes they seem to hang together when they don't really. See?"

"Yes, sir."

"Where'd you ever get your eyes and ears, anyway?" said Mr. Conne, abruptly.

"You learn to observe when you're a

Scout," said Tom.

Here and there little groups of passengers stood chatting as they waited for breakfast. Among them were a few

men in khaki whom Tom understood to be army surgeons and engineers the forerunners of the legions who would "come across" later.

"Which would you rather be?" queried Mr. Conne; "a detective or a wireless

operator?"

"I'd rather be a regular soldier," said Tom; "I made up my mind to it. I'm only waiting till I'm eighteen." "What do you suppose became of the operator?" Tom asked, a little anxiously.

"I don't know," said Mr. Conne. "We'll have to find some one who does know," he added, significantly, and Tom wondered what he meant.

"Do you think he's guilty of any-

thing?" he asked.

"Don't know. You've knocked my theories all endways, young fellow,"



". . . Suffering from Nerves, Doctor?"

Mr. Conne gave him a shrewd sidewise glance, his cigar pointing upward like a piece of field-artillery.

"Well, I guess if you've got your mind made up you'll do it," said he.

"But I hope I can work on this ship when she's a regular transport and keep working on her till I'm eighteen."

"You haven't answered my question

yet."

"I don't know which I'd rather be," said Tom.

"Hmmmm!" said Mr. Conne.

Mr. Conne said, pleasantly, and then added, smiling: "You say he was a Scout. I'm getting to have a pretty good opinion of Scouts."

"But those fingerprints-"

"Were his," concluded Mr. Conne.

Tom was greatly puzzled, but said nothing. Soon Doctor Curry appeared. He was pacing up and down the deck and paused at the rail as they neared, so that they were able to get a good look at him. He was tall and thin, with a black mustache and a very aristocratic

hooked nose. Perhaps there was the merest suggestion of the foreigner about him, but nothing in particular to suggest the German.

Mr. Conne sauntered up to him with a friendly and familiar air, though Tom

was trembling all over.

"Excuse me, would you oblige me with the time?" Mr. Conne said, pleasantly.

The stranger wheeled about suddenly, with a very pronounced military air, and looked at the questioner.

"The time? Yes, sir," he said, with brisk formality and taking out his watch. "It is just half past six."

Mr. Conne drew out his own watch and looked at it for a moment as if perplexed. "Then one of us is about an hour out of the way," he said, sociably, while Tom stood by in anxious suspense. "According to the alarm down in the store-room I guess you're right," he added.

"What?" said the passenger, disconcerted.

"According to the time-bomb down below," repeated Mr. Conne, still sociably, but with a keen, searching look. "What's the matter? Suffering from nerves, Doctor?"

The sudden thrust, enveloped in Mr. Conne's easy manner, had indeed taken the doctor almost off his feet.

"I do not understand you, sir," he said, with forbidding dignity and trying

to regain his poise.

"Well then, I'll explain," said Mr. Conne; "you forgot to set your watch when you left Cleveland, Doc, and there won't be any explosion down below at nine o'clock, and there won't be any at all, so don' worry."

He worked his cigar over into the corner of his mouth and looked up at his victim in a tantalizing manner, waiting. And he was not disappointed, for in the angry tirade which the passenger uttered it became very apparent

that he was a foreigner. Mr. Conne

seemed quietly amused.

"Doc," said he, sociably, almost confidentially, "I believe if it hadn't been for this youngster here, you'd have gotten away with it. It's too bad about your watch being slow—German reservists and ex-Army officers ought to remember that this is a wide country. When you're coming across Uncle Sam's back yard to blow up ships, it's customary to put your watch an hour ahead in Cleveland, Doc. Where's all your German efficiency? Here's a wideawake American youngster got you beaten to a standstill—"

"This is abominable!" roared the

man.

"Say that again, Doc," laughed Mr. Conne. "I like the way you say it when you're mad. So that's why you didn't get off the ship in time last night, eh?" he added, with a touch of severity. "Watch slow! Bah! You're a bungler, Doc! Here's an American boy, never studied the German spy system, and, by jingoes! he's tripped you up—and saved a dozen ships and a half a dozen munition-factories, for all I know. German efficiency—bah! The Boy Scouts have got you nailed to the mast!"

Then suddenly the detective be-

came serious.

"You'll have to show me your passport, sir," he said, "and any other papers you have. Then I'm going to lock you up."

The next morning Tom met Mr. Conne.

"Well, I see the captain beat me to it," said he. "I was thinking of working you into the Secret Service, but never mind, there's time enough. You go ahead and make good as assistant to the wireless operator."

"Maybe I won't satisfy them; sometimes I make mistakes," said Tom. "I made a mistake when I went into the wrong store-room, if it comes to that. They always called me Bullhead, the fellers in the troop did."

Mr. Conne cooked his head sideways, screwed his cigar over to the extreme

corner of his mouth, and looked at Tom with a humorous scrutiny.

"Did they?" said he. "All right, Tommy, Uncle Sam and I mean to keep our eyes on you, just the same."

IMMIGRANT WORDS AND PRISONERS OF WAR

Where Some of the Common War Terms Come From

HAVE you ever thought how words come into the language? It is great fun to take a common English word and look up its ancestors. Probably the Federal authorities didn't realize that the word war is of German descent or it would have been interned with the other enemy aliens. But, after all, it has been a kind of "gentleman adventurer," fighting under many flags. For instance, war appears in Middle English (the language of England in about the twelfth century) as werre. In Old French, too, it is at first werre, then guerre, its present form. It is first cousin to an old German word, werran, which means to twist or entangle, and though you might not guess it, that kinship makes it cousin to our word worse.

Language has been called "fossil history" because the commonest every-day words preserve the history of the country to which they belong. A great deal of borrowing goes on between countries, but it is always possible to trace a word back to its origin or roots. What a record of inventions, how much of the past history of commerce words embody and preserve! The magnet has its name from Magnesia, a district of Thessaly, whence we get another word magnesia, since that medicinal earth was found there in large quantities.

WORDS FROM OLD WARS

Grenadier comes from the Spanish, where it was *grenadero*, a soldier armed with a hand grenade.

Grenade from the Spanish grenada, so called from its likeness to a pomegranate.

Musket comes from the Italian, from mosquetta, a sparrow-hawk. At first musket was used to denote a small mortar which threw arrows. When gunpowder was invented a cannon was baptized musket.

Howitzer comes from the Bohemian haufnice, a sling for casting stones.

Bayonet derives its name from the city in France, Bayonne, where it was first made or used.

Sword comes straight from the Anglo-Saxon sweord.

Pistol is named from the Italian town Pistoja, famous in the Middle Ages for its manufacture of arms.

Dragoon comes from the French. They were soldiers who had dragons painted on their shields.

Cuirassier is from the French. The soldiers carried a breast protection made of copper—in French cuivre.

Hussar comes from the Hungarian husz, meaning twenty. The name is derived from the fact that long ago every twentieth recruit in Hungary was placed in one of the mounted regiments.

Uhlan comes from the Turkish word

oglan, which means youth.

Major is derived from the Latin comparative of magnus, meaning great or high.

Colonel we get from the Italian colonello, which came to mean a column of men as well as a column of stone.

Chauvinism, a French term originally from Nicolas Chauvin, a soldier in the Army of Napoleon who was ridiculed by his comrades for his demonstrative and unreasoning patriotism.

Machiavellianism, a term descriptive of unscrupulous diplomacy and politics, derived from Niccolo Machiavelli, a

Florentine statesman.

Pontoon is a Dutch word meaning a special kind of bridge.

WORDS AND TERMS ORIGINATING IN THE FRESENT WAR

The terms which owe their origin to this war are many. There are slang phrases and words that have become a part of the language, and there are words which were carried over from civil life and drafted into war service. There are also a number of catch phrases, some of them from chance remarks made by prominent men and adopted as a slogan.

Anzac is a composite word used to denote the troops of the Australian-New Zealand Army Corps that were engaged in the Gallipoli campaign.

Blighty comes from the Hindustani

Balati, meaning England.

Cadets. The Constitutional-Democratic party of Russia, so called from the initial letters of the party name.

Hindenburg Line, a carefully prepared line of defense supposedly invulnerable, running through Laon, La Fère, St.-Quentin, Cambrai, and Lille, and joining the old line at Vimy Ridge north of Arras.

Place in the sun. A phrase used by

William II, speaking of Germany's acquisition of the Chinese harbor at Kiaochow. He said, "In spite of the fact that we have no such fleet as we should have, we have conquered for ourselves a place in the sun."

Scrap of Paper. The British ambassador in Berlin justified England's



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The Lord Lieutenant Visits Belfast
This is Field-Marshal French in the capacity of Lord
Lieutenant of Ireland.

entrance into the war on the ground that Germany had violated the neutrality of Belgium which England was pledged by treaty to defend. He reported a conversation with the German Chancellor, Bethmann - Hollweg, who said that "the step taken by His Majesty's government was terrible to a degree; just for a word, 'neutrality,' a word which in war-time had so often been disregarded—just for a scrap of paper Great Britain was going to make war on a kindred nation who desired nothing better than to be friends with her."

Schrechlichkeit, the German for frightfulness, given to the German method of warfare whereby they make war



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"Kilties" Making Friends with "Yank"

One virtue of war is the bringing of different kinds of men from every corner of the world to share one another's ideas.

terrible in the hope of winning victory through fear.

Free ships, free goods. The doctrine that all non-contraband goods on board a neutral vessel should be considered exempt from belligerent capture.

Der Tag. A favorite toast in the

German Army, meaning the day when war would come.

America First. From a speech of President Wilson's regarding the foreignborn. "I would not be afraid, upon the test of America First, to take a census of all the foreign-born citizens of the United States."

Old Contemptibles. The name for the British Expeditionary Force, affectionately taken by the English from the Kaiser's scornful description, "contemptible little Army."

Boloism is used to designate treacherous or spy work, from Bolo Pasha.

Spurlos versenkt. A German phrase meaning "sunk without leaving a trace." It was contained in a secret telegram giving orders concerning the sinking of Argentine steamers.

Barrage. A new word in the military vocabulary; specifically the act of barring by artillery fire.

Blacklist. A list of persons or firms suspected of enemy association.

Bolsheviki. A Russian word meaning "belonging to the majority."

Camouflage is a French word to designate the military art of painting objects of war so that they will blend into the landscape.

Junker, a member of a noble Prussian family who belongs to the landed aristocracy and as a rule adopts the profession of arms.

Kultur indicates the whole mass of customs, conventions, laws, etc., from which the Prussians derive their outlook.

Poilu. The affectionate term applied by the French to their soldiers. Literally it means hairy or bearded. It was first applied to a body of soldiers who wore curious hats made of hair; then it was used to denote men in the trenches, for the French soldier in active service does not shave. It has the connotation of courage and bravery.

Boche. Used first by the French to

designate the Germans. There is some dispute over its origin. Some say it is from the word *caboche*, a square-headed nail. Others affirm that it is from *Alleboche*, a word composed of *Allemand*, meaning German, with the derisive termination *boche*.

SOLDIER SLANG

The soldier in the trenches has a language of his own. His slang is wonderful, but incomprehensible to the lay mind.

Rosalie. The poilu's pet name for his

bayonet.

Dud is applied to shells that fail to explode, and to airplanes of an old-fashioned model. It is derived from a very old English word meaning first clothes, then old clothes or rags.

Crump used to describe a certain kind of heavy shell. An onomatopoetic word derived from the peculiar sound of the

detonation.

Kiwi. A man in the ground service of aviation, named for the Australian bird that cannot fly.

Bertha. A big German gun named after the Krupps' oldest daughter.

Jack Johnson. A shell that gives forth a quantity of black smoke.

Coal-box. A shell that gives forth a quantity of black smoke.

Big stuff means large shells.

Marmites means large shells. A French word meaning stewpans.

Un Bleu is a French soldier, so called

from the color of his uniform.

Un Bluet of Marie Louise is a young soldier. The latter term comes from the time of Napoleon's marriage with Marie Louise in 1810, when France, having exhausted all her men, was calling on the young boys.

Strafe has been adopted into English from the German song of bitter hatred, Gott strafe England (God punish Eng-

land).

Hickboo. Aviator's term meaning that enemy planes are near. Distorted

Indian word for eagle.

He hasn't come back for his cap. Airmen's slang, meaning a man has been killed. It comes from the custom in one flying-field of the pilots hanging their cap on one of a long row of pegs before going out for a flight.

Pill-box. Instead of open trenches, steel and concrete turrets, connected by scraps of trenches and barbed-wire entanglements, were found to be more

effective.

"CAP"

The Red Cross Dog

By Georgene Faulkner

'CAP' was a shepherd-dog. He did not come from any long-titled pedigree; he was just a dog, a plain dog. But one look into his honest brown eyes would tell you that Cap was to be trusted. He had character and could always be depended upon.

From the time that he was a small puppy he had tried to help every one

upon the farm and he guarded the baby of the house as though he were responsible for him. As baby toddled about, Cap walked proudly at his side, as much as to say, "I will watch him and see that he does not fall." Sometimes, as they lay side by side in the sunny dooryard, the baby would bury both fat wrists into Cap's soft coat and pull out

handfuls of fur, but Cap never growled at baby.

One time the baby fell face downward into the duck-pond and would have drowned, but faithful Cap pulled him out of the water. Then, seizing baby's muddy little hat in his mouth, he plunged away to the farm-house, barking and calling for help. "Yere-ere-ere-err-yere-yere-ere, come here-here-ere-

day the boy and his dog wandered across the hills together. Then, when the sheep were ready to come home, Cap barked at their heels and not one of them dared to disobey his sharp command, "Yere-yere, come here!" He was like a captain calling his orders to his soldiers, "Fall in! Forward—March!" And the sheep would scurry before him down the dusty road.



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Italian Dog-Trains Carrying Supplies to the Front

ere," barked Cap. The frightened family followed at his heels and soon brought the screaming, drenched baby into the house.

"That puppy is truly a captain," said his master; "he knows just what to do." So from that day the dog was named Captain and called "Cap."

The whole family loved the bright little puppy, but his special friend was Pierre. Pierre was twelve years old on the day that Cap was born and he felt that Cap was his birthday present and special charge. Pierre trained Cap to come at his call and to go out with him to watch and guard the sheep. Every

One day, when they were far up on the hillside, a little lamb fell over the rocky side of the ravine and dropped on the ledge below. "Ma-ma-ma!" bleated the poor baby lamb, as it cried for its mother.

The mother sheep answered, "Baa-baa-baa-aaa!" and went at once to the side of the hill. The poor mother sheep, however, did not know how to reach her frightened baby; so she called loudly for help.

It was a very warm day and Pierre, lying down under a tree, was soon fast asleep while the faithful Cap, stretched out at his side, was resting as he watched

the sheep grazing peacefully on the green hillside. Suddenly he sat up and his ears pricked forward as he heard the call of distress. He ran quickly over the rocks, and when he saw the baby lamb down below he gave a loud sharp

dog. Cap led him on with sharp barks of command until they reached the ledge where the lamb had fallen.

When Pierre looked down it was so steep that it made him almost dizzy to think of climbing down there. What



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Helping to Beat the Kaiser

During the war when the German submarines were threatening to cut off England from the rest of the world, every bit of food counted, so these little workers were really making ammunition of war.

bark, as much as to say, "Hold on; we will help you."

He knew that he could not reach the lamb, but he knew that his young master could do so. Quick as a flash he ran back under the tree and tugged at Pierre's coat until the sleepy shepherd-boy was wide awake.

From Cap's actions the boy knew that some lamb was in trouble, and, seizing his shepherd's staff, he climbed up over the rocks, following the excited could he do? He must not leave the poor lamb to die.

Cap looked at his master with eager, expectant eyes. Pierre would think of some way, he knew, and he, Cap, would help him. Suddenly the dog remembered a long, strong rope which the boy had brought with him. Cap rushed back. Soon, with one end of the rope in his mouth and the rest trailing along behind him, he came back to his young master.

"Good dog, Cap!" said Pierre, "the rope—why, of course, it is the only way."

Then, tying one end of the rope to a strong tree-trunk on the top of the hill and the other end around his own body, he lowered himself over the side of the rocks. He took the staff in his hand, because he saw that he could not reach the lamb otherwise. At last he reached the end of the rope and then, leaning far over, he put the staff under the tiny lamb and lifted it up in his strong arms. But, as he looked up over that smooth rocky ravine, he wondered how he could climb back with the lamb in his arms. Cap was barking wildly overhead and the mother sheep was bleating mournfully. A misstep would mean sure death for them both. The boy shut his teeth, and, looking up toward the sky, he prayed, "O God, help me!"

Instantly his prayer was answered, for he knew just what to do. Untying the rope from his body, he tied it around the lamb and, leaning against a scrubby little pine-tree for support, he called, "Hey, Cap! Hey, Cap!" The dog looked down and, realizing at once that he must work, with his sharp teeth he pulled up the lamb. Then he tugged at the rope end until he freed the lamb, and the poor frightened baby curled up safely by its mother.

With the free end of the rope in his mouth, Cap went to the ledge and dropped the rope over toward the boy. The rope caught in the branches of the pine-tree; but Pierre, with his staff, pulled it down and tied it securely around his waist. Then he began his perilous climb up the rocks. The big dog at the top barked his encouragement and from time to time would tug at the rope, pulling Pierre on his way.

At last the boy reached the top of the rocks. His clothing was torn and his legs and arms were bruised and bleeding, but he was safe and he knew that the lamb was safe also. Then Pierre, weak and dizzy with a sprained ankle, fell upon the ground, exhausted. Cap licked the face and hands of his young master, and then, as he did not get up and walk, Cap became excited again. He said, as plainly as a dog could talk, "Lie here and rest while I go for help."

So good Cap took his young master's cap in his teeth and ran down into the valley, where the farmer and his son were reaping. The farmer at once knew that something had happened to his boy, and so they all followed Cap up the hillside until they found Pierre. The rope fastened to him and tied about the tree, together with his bruised body, told them the story.

"My poor, brave boy!" said the father. "You should not have risked your life for a lamb."

"Why, I did not do it alone, father," said the boy. "It was Cap. He knew just what to do and he helped me."

"Good dog, Cap!" said the farmer, as he patted the dog on the head, and Cap licked his hand to show that he knew that he was appreciated.

Pierre suffered so much from a sprained ankle and from his bruises that for a time he could not watch the flock, but Cap had proved that he could be trusted to look after the sheep. So for a while the shepherd-dog went out alone to the hillside. But when the boy was better they went out together to take care of the flock; and many happy days they spent wandering over the hills, for the boy and his dog were inseparable friends.

"Cap is my best friend," said Pierre.
"He always understands everything I say to him. I know that he loves me and I love him dearly."

CAP GOES TO WAR

The years went on and war came to the peaceful valley. The boy Pierri was now a young man eighteen years old, and glad that he was to march away and serve his country.

Across the green pastures, ugly trenches were dug and barbed-wire coils were tangled everywhere. There were no sheep grazing upon the hillside now. They had all been sold and killed for food, while the dog Captain had been given to the ambulance corps.

"My son has gone to the front," said the father, proudly, "and I shall go, too, when I am needed. This shepherddog, Captain, is his dog and he trained him; so I know that my boy will be glad to have his dog in service also. He

is a good dog—Cap!"

So Cap was given to the Red Cross Society and was soon trained to search out the wounded upon the battlefield and to bring them help. Cap was very proud of his harness, with its relief supplies and tiny canteens, and of his red cross, the badge of service. From the first day he showed his ability to look after the wounded soldiers.

"That dog is the kindest and most faithful animal in the whole lot," said the young doctor who trained Cap for the service. "The other day Captain saved thirty lives by his persistent searching on the battlefield; and we know that when Cap comes back holding a hat in his mouth there is some one out there whom we can help, and he leads us just to the place at once. Why, that dog almost talks, he is so intelligent."

One day there was a frightful firing across the trenches and the dogs and men suffered from the deadly fumes of poisonous gas. The doctor then put a mask over Cap's face to protect him from the gases. Cap seemed to know that it was for his own good, and, although he had never worn a muzzle in his life, he did not snarl or growl at this strange mask, but went right on with his work.

When the firing ceased and the fumes had passed away the mask was removed from Cap. He ran out into the valley of death, into the "No Man's Land" of the dead and wounded and sniffed about to find some one to help. Alas, how many of those brave boys were lying there in their last sleep! Cap sniffed about and at last was rewarded by finding a young soldier who was alive. As he sniffed the wounded soldier, his tail wagged in joy, and he suddenly broke the law of the Red Cross dogs and barked, in his excitement, a loud, sharp bark. The dogs had been trained never to bark and attract the enemy, but this time Cap could not control himself, for he had found his own young master.

Pierre had been wounded by the shrapnel and had fallen upon his face, but Cap soon pushed him over upon his back. The sharp barking of his dog aroused the unconscious young soldier, who, gazing upward, looked into the loving eyes of his faithful friend. "Cap—oh, Cap!" gasped Pierre. "Good dog! did you come for me? It is too late now, Cap," and Pierre groaned with the

pain as he closed his eyes.

Cap gazed at him with pity and then began to lick Pierre's face with his rough tongue, as much as to say, "You must keep awake and I will help you." Pierre opened his eyes and looked again at Cap. Then, seeing the flask carried in the harness of the dog, he seized it eagerly and, taking a drink, he said, "You are right, Cap, I will brace up until you bring some one to help me."

The dog took the young soldier's cap between his teeth and ran back to the hospital tent and the doctor. As he put the hat down he barked again sharply, as much as to say, "Do come quickly!"

"Now, Cap, none of that," said the doctor. "We will go to your soldier, but you must not command us by a bark."

Soon the ambulance men followed the excited dog and found the young soldier, who had again 'ainted from the loss of blood. Cap began to lick Pierre's hands and to kiss his face.

"Here, Cap, down," said the young doctor. "You must not be so rough with your caresses."

But the wounded soldier boy opened his eyes and said, "My dog—good dog



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Two Tiny Specimens of England's Home Army

—Cap—saved my life when I went for a lost lamb, once—now, again—just on time—good dog—Cap."

As the young man was rolled upon the stretcher he closed his eyes with that far-away look. Cap walked slowly behind the ambulance that carried his master to the hospital, where he stretched out by the door, waiting and watching. All night long he watched and waited; he would not go out in the field again, for his own master might need him.

The doctor, who understood dogs as well as he did men, would not let them order the dog away. "Look at his big eyes; he is suffering with his wounded young master. No, Cap shall stay here and watch; the other dogs can do the field work." So he took off the harness from Cap and let him stay on guard at the door.

Cap waited and watched for several weary days and long nights, and every time the door opened he would look anxiously at the doctor. "All right, Cap, your master will pull through," said the doctor at last. Sure enough, that day Pierre opened his eyes to the world again and his delirium had passed. He asked for Cap, and the dog was brought in. With his paws resting on his master's cot, Cap looked lovingly into his face.

"You saved my life, Cap, and when I am well and strong I will go back into the trenches. We must both fight for France, you and I, and now, old Cap, dear old Cap, you must go back to the field and look after the wounded, as you did long ago when I was hurt and you went out and guarded the sheep. I will be all right again and I will do my part, but, Cap, old man, you must go back now! Good-by, Cap— Good dog!—Cap!"

Cap gave his head a shake and then, looking long and earnestly at his young master, he licked Pierre's face and hands. After this good-by caress he trotted out and stood at attention before the doctor.

The doctor understood and buckled on Cap's Red Cross uniform and fitted him out for field work again. Then he bent over the dog and, patting him upon his head, he said the very words of the wounded young master:

"Good-by, Cap— Good dog!—Cap!"

THE AMBULANCE-DRIVER

Paul Cody Bentley, a Young American Hero

By Georgene Faulkner

"LET us play that we are knights," said young Paul Bentley to his kindergarten teacher, and as the leader of the knights the small boy galloped about upon an imaginary horse, playing out his deeds of valor. But later the games that he played became a reality, and as a soldier boy of to-day we hear of his accomplishing these "deeds of valor," for he drove an ambulance through the shell-stricken roads of France, was awarded the Croix de Guerre for bravery under fire, and then gave up his life in the performance of his duty.

Small Paul was always interested in the tales of the heroes of long ago. "Please tell of good King Arthur and his brave knights," he would plead; and he lived these stories, for he was filled with the spirit of chivalry and was always courteous in his speech and manner. "A real little knight," the grown-ups would say as they saw Paul waiting upon his mother and caring for and protecting his little brother.

When he was older and went to school one of the first plays that he wrote was about King Arthur and his knights, and it was so well written that the teacher let the children act it out for a school play.

Paul was a good student, for he had remarkable power of concentration, and he was very conscientious in his work. He did everything with his whole heart and soul—worked hard at his lessons and played hard on the playground.

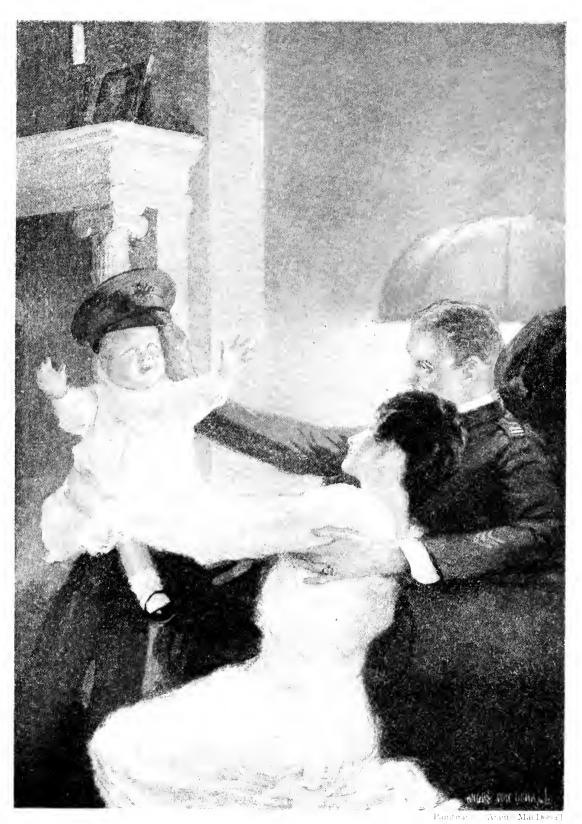
"Paul always plays fair," said one of his chums, admiringly, "and he is so brave he is never afraid to do things." And Paul was not afraid, provided that the thing was right, for he had a strong sense of justice and of right and wrong.

He was fortunate in having the companionship of a dear grandmother, who influenced him by her stories and her example during his early years. He never forgot the lessons learned at his grandmother's knee, and when he was only nine years old he became a member of the church. His mother said that when he was about to return to college, at the close of his Christmas holidays, and was saying good-by to the family, he went back into the livingroom and looked again at the portrait of his grandmother, as though he were really taking a last farewell of her.

Paul's record at Harvard was very high and his name was upon the Honor Roll. As he had "A" in most of his work, he was excused from examinations, and was graduated from Harvard in June, although he was absent in the service of his country. For, as soon as war was declared, Paul was anxious to go over to France and serve in this World War for humanity.

PAUL ENLISTS

He had spent two summers in the soldiers' training-camp at Plattsburg and the first summer upon a long hike he strained the arches o. his feet so that he could not belong to the infantry. The next season he joined the cavalry corps, but his eyes were weak, and they bothered him so much that he knew he



The New Commander-in-Chief



could never serve in the Regular Army; and so he said to his mother, "I shall join the ambulance corps, for I must go and do what I can to help, and I can drive."

So, with a number of his Harvard friends, Paul Cody Bentley became one of Unit 65, which unit was later honored by the French government for their bravery under fire.

His mother went to see him before he sailed for France, and they had a happy visit together; but whenever she seemed depressed and worried he would say:

"Now please do not worry about me, mother; there really is no danger in driving an ambulance." And all through his letters, as he described the scenes of to-day, he made light of the danger and tried, like a young knight, to spare her feelings, so that she would not be alarmed for his safety.

In his letters Paul told how he learned to drive the French gear-shift cars, and how necessary it was for each driver to understand his machine and to be able to repair it. Each car had two men and Paul and his friend, Noble Lee, worked together, and Paul praised the ability of his friend in handling the car.

He told of driving through that region which had just been recaptured by the French, where they passed line after line of trenches which the Germans had been forced to abandon. Between the trenches there were no fields of corn or grain to be seen, but the harvest there was a mass of tangled barbed wire. The towns in the stricken country were all in ruins; homes and churches were destroyed and desecrated, and he said, "It is literally true that not one stone is left standing in its place upon another."

When the tired ambulance-drivers reached these ruined towns the wrecked stone houses and barns had to serve as their cantonments, and often they found these shelters so full of straw and dirt

that the boys took their stretchers out under the trees and slept in the open. And they slept well, in spite of the cannonading at the front and the snapping sound of the mitrailleuse, which Paul said "sounded like bunches of firecrackers."

But there was never any complaint of these hardships endured. "I like to sleep outdoors," he wrote. And again he said, "Living out of doors agrees with me; in fact, I never was in better condition physically."

One afternoon Paul and his partner went out upon the hillside and, climbing a haystack, they watched through their glasses a number of observation balloons and airplanes, and "Around one—probably a Boche—" he wrote, "we could see the shrapnel bursting and leaving little black patches of smoke on all sides of the machine."

And in another letter he wrote about an airplane raid at night, with the big planes circling about overhead and the explosion of bombs dropping upon all sides. The sky was streaked with the light from the search-lights and flashing rays shot out from the star-shells. "Of course, there was very little danger, but the noise and light were very interesting."

Then the young knight wrote of the armor of to-day, which was given to him and his friends to wear:

"Yesterday we were issued gas-masks. We each got two, and we were taught how to put them on quickly. They are the spookiest-looking things imaginable; in fact, they make the owner look like some strange species of animal. We were also issued the blue steel helmets of the French Army. I don't know whether there will ever be occasion to use either of them, but we keep them on the ambulance with as."

And then later the suffocating gases came upon them. At first the odor was so faint that the drivers did not notice it, but when the waves of gas came nearer and nearer the boys grew dizzy and were overcome; so it was wise for them to always put on their gas-masks at once.

"There is a new and deadly form of gas which is being used lately," writes Paul. "It is invisible; it cannot be smelled; it has no effect for hours; at the end of this time a rash breaks out on the victim and he dies in a few hours. . . . Such a ghastly invention is almost inconceivable. It sounds more like a fairy-tale than the brutal truth."

And so we read on and on at this time pages which are making history, not of fairy-tales and horrors endured by the knights of old, but the terrors which our young knights of to-day are meeting at the front so fearlessly and bravely.

"Do not worry, mother, there is no danger," he wrote, pluckily, while the shells were bursting upon the road over which he drove. Thus the young knight of to-day tried to reassure the loved ones at home. Then he wrote that an airplane raid is an "interesting sight," and the sky "looks like the Fourth of July." And that there is "no danger from gases if one puts on his mask quickly."

He is a very human young hero and wrote longingly for some sweet chocolate to eat; and at the end of one letter he adds, "How I long for a good Ameri-

can meal!"

He urged his mother to send him a warm sweater, and he also said, "I would appreciate it most if you would knit me some golf-stockings," and it is needless to say that his mother answered his appeal at once.

Paul wrote very graphically, describing the duties of an ambulance-driver, and in one letter he spoke of the drivers standing in the courtvard ready to drive.

"In the entrance to the cave there are numerous brancardiers sitting around who, when there are wounded, rush out and shove them into the car. Then we hurry out, crank up the car with all speed, and go as fast as possible over a narrow road which winds through the village, which is no longer anything but

a pile of debris.

"After passing the village one is in sight of the Boches for about three hundred vards. Needless to say, one has no scruples about going fast over this stretch, even with wounded in the car. . . . After getting beyond shell-fire, we drive very slowly. . . . Last night we rolled all night. One shell burst a hundred feet behind us and another one hundred vards in front of us on the first trip. Words can hardly describe what it is like, driving at night near the poste de secours when the fighting is active."

One dark, stormy evening Paul was driving his car down a long, sloping hillside. The road turned about in the form of a letter "S," and on one side was a steep embankment. It was a dangerous place in broad daylight, but this night the rain was coming down in torrents and the road was slippery with mud.

There were four wounded French soldiers in his car and Paul drove very carefully around the turn of the road when, suddenly, he discovered that they were exposed to shell-fire. shells were bursting all around them; it was too late to go back, and so he decided to run through it. Just as the car was making the last turn, a shell fell five feet from it and to the rear, ripping away one side of the car and killing three of the wounded soldiers. and wounding Paul and the young boy driving with him.

Although Paul had two severe wounds, his first thought was to protect those in his ambulance, and so he drew up to the high bank at the side of the road and

stopped the car.

His great friend, Noble Lee, was not with him on this last drive, for that very day he had been granted leave of

absence, and later he came over that road in another ambulance. When he found that Paul had been wounded he drove with him to the hospital. Young Lee wrote very sympathetic and comforting letters home to the brokenhearted family. He said that Paul spoke frequently to him and his mind was very clear, although he lost a great deal of blood on the ride to the hospital. Once he looked up at Lee and said, "If I don't get well, tell mother I love her and died for her and for civilization."

He endured his suffering bravely and was very plucky about his wounds, and told Lee he felt that he would soon be all right. He was very happy when the French officers came to him in the hospital and conferred upon him the Croix de Guerre. He appreciated the honor and delighted the officers by responding with a little speech of his own. He said:

"I am glad to receive the medal from France, and I am glad to have been of service to France and to humanity, and I hope that I may continue to be of service."

Paul had the best of attention and

medical care and his friends all felt hopeful of his recovery, although an X-ray examination showed a piece of steel was lodged near his heart. An operation was performed, but Paul was too weak to endure it.

One of his friends wrote of him: "Bentley was one of the finest fellows I ever met. He was one of the best drivers in our section. He never complained; he took the dangers as they came, without flinching. Everybody who came in contact with him admired him. Bentley was every inch a man—a true man—he died as he worked—bravely!"

Like the knights of old, he rode forth to conquer or die, and his life is typical of our young heroes at the front to-day, who are willing to die that others may live.

Paul Cody Bentley was buried in a soldier's grave in the little hospital cemetery at St.-Guilles on the Alane River, and Noble Lee wrote of this last resting-place as follows:

"Out on a south hillside, touched by the rising and the setting sun, he sleeps with many others."

SCRAGS, THE REGIMENTAL COWARD

The Diary of a Yellow Dog Who Went to War

August 3, 1917.—This has been a wretched day for me. I heard a man call it a "dog day," but he must have meant that dogs don't like it. The streets were so soft my toes got stuck. Found part of an old sandwich.

August 5th.—Killed a big rat on the wharves. He gave me a sore nose but a full meal.

August 6th.—Saw a man to-day that looked like Jim Culligan and followed him for a mile, but it wasn't Jim. I haven't seen him for two months now,

ever since the night he hit the policeman. It was terrible. He went away and never said a word to me. Found a cool place to sleep at night on the wharves. The wind comes through the cracks.

August 10th.—Champ set on me again to-day. He's twice my size, so I didn't have much chance. Too tired and sore to keep on hunting for something to eat.

August 11th.—This has been the most wonderful day of my life. But I must put it down as it happened. I was

hanging around a troop-ship, hoping that some one would throw me something to eat, when I saw Champ swaggering down the wharf in that ugly way he has. He'd eaten three meals a day all his life and I'd scarcely had a bite all day. That isn't much of an excuse for me, maybe, but there was a gangplank near me and I just went up it. One of the soldiers leaning over the rail began calling out, "Slacker! slacker!" and the others all laughed. I wished then that I'd staved out and let Champ lick me, and thought that I might just as well, as they'd throw me out, anyway. But somehow no one noticed me in the confusion, and I got in between some crates and lay down very quietly. After a while the boat began to tremble, and then it started off. I could feel it moving and knew we were going out into the harbor. "When they find me I guess they'll throw me overboard," I thought, "but that 'll be better than to go on living on the wharves." After a while I heard loud voices and footsteps, of men sorting out the crates, and suddenly a rough hand grabbed me by the back of my neck and slung me into an open space among a great many legs, and the same voice who had velled "Slacker!" at me said: "It's that same cur we saw on the wharf. Well, he'll have a chance for a nice little longdistance swim to New York." I knew he was coming toward me again and took a desperate look at the faces around me in a wall. Between weakness and fright I couldn't keep from trembling, and most of them were looking at me as though I were no better than a rat, when, just as I'd given up hope, I saw Sergeant Macdonald. I backed up against him, facing the others. "All right, old boy," he said, just as if I'd spoken, "I'll see what I can do for you." There was a lot of trouble, but at last the captain said I could stay, as the regiment had only a goat for a mascot,

and, anyway, I seemed to have enlisted. "Enlisted nothing!" said Sam Leary afterward (he was the one who wanted to drown me). "That beast hasn't nerve enough to enlist in a knitting society. A nice mascot he'll make. We'll never get him near the front." "You leave that to Scrags," said Sergeant Macdonald, with his hand on my head. "I know dogs." He named me Scrags right off because I looked so rough, but the way he said it I liked the name. But Sam Leary only laughed. I guess he's right. I'm a coward and not worth saving.

August 15th.—Our ship is painted in long zigzags and stripes, so that we can't be seen clearly I've heard them say. I don't quite know who they don't want to see them, but when no one has invited me to play I watch the water with them to find out what they're looking for. To-day I saw something big moving among the waves. I thought maybe that was it and barked. "It's a submarine!" yelled Sam Leary. Then the thing spouted. "Only a whale," said Sergeant Mac. "Lose your nerve, Sam? It was Scrags's little joke." I think they don't like each other. Chased a rat into the captain's state-room last night. Didn't I catch it, though!

August 10th.—Rags, the goat, and I had a misunderstanding this morning. Rags lost part of an ear, and I think one of my ribs is cracked. He started to tell me what the regiment thought of me. I guess he was right; Sam Leary's told them often enough, and I don't look like much. But Rags won't take it on himself to tell me again.

August 22d.—To-day we disembarked. It's a very funny-looking town and the roofs of the houses almost meet over the streets. Every one talked differently; even the dogs didn't know English, but as long as I'm with Sergeant Macdonald I'd go any place. The dogs

pull carts, like horses, looking very silly and put upon, I thought, and I was just going to laugh at one of them when I saw that their masters were helping to pull, too, and that they were in trouble. You can bet that laugh died in my whiskers.

August 25th.—We're being hurried up to the front, whatever that is. I only remember that Sam Leary thinks that I'll never get there. The captain thought I ought to be left with Rags, but Sergeant Mac said I'd make a good outpost dog, so here I am going forward with the troops—sometimes crowded with forty men in a car, sometimes marching through dust so thick that it almost chokes me. Somehow I don't see any houses, but just tumbles of brick and stone with chimneys standing in them, and there aren't any crops in the fields.

August 27th.—There's a noise like thunder crashing and banging all the time. I don't mind it so much now, but when I first heard it I guess I looked scared, for Sam Leary kicked me. "Yellow!" he said, but Sergeant Mac called out that if he touched that dog again there'd be a pile more trouble than he'd like. To-morrow we go to Villerois, which the Boches have been occupying. I know what a Boche is now; they wear green-gray clothes and have white faces and heavy boots. Some of our men were taking a lot of them through our lines, and I could see that our men didn't like them, though they didn't say much. If only tomorrow Sergeant Macdonald won't have to be ashamed of me!

August 28th.—I've left him—it was terrible—we were going through Villerois in the dust. There were broken houses and the bodies of dead men everywhere, and we were resting in the street, waiting an order to go forward. I was thinking how strange it was to have houses and no one in them when

I heard a baby's cry. I had heard our men say that the Germans had sent back the civilians, and at first I couldn't believe my ears. Then I heard it again, scared and lonely. I knew just how that felt. It sounded as though it came from behind a fallen wall, and then I knew that it came from a cellar. I didn't want to go down there, away from the troops, but no one heard it but me, and I had to go. The staircase was broken and there was a smell of wine from empty casks, and in the corner I found a little girl, just able to walk. I poked my nose into her hand, and she threw her arms around my neck, holding fast to my coat. It was just then I heard an order, and our men fell into position. I heard Sergeant Macdonald call my name, but the child held tight and I couldn't leave her alone. I barked and barked, but in all that moving of feet no one heard me. It made me feel desperate to know that Sam Leary would say, "I told you all that he'd never go to the front," and that now at last Sergeant Mac would think I was a coward. I lay down beside the little girl, and she went to sleep with her head resting against me. She had stopped crying, and everything was still, but I kept thinking, "Suppose Sergeant Macdonald needed me and I not there!" I nearly went mad. the morning I went hunting for food, but couldn't find any. Overhead the shells were screaming and the horizon was covered with white and black smoke in puffs. Then I saw dust along the road and prayed that it was my regiment come back, but it was the Boches. I hated their hot, red faces, covered with dust, and ran back to the cellar in case the French baby might need me, but I had no food for her. All day I lay beside her, waiting. Sometimes men would come into the cellar and stumble among the wine-casks, but there was no wine in them and they

went away cursing, without coming near our corner. For a long time the little girl was too frightened by the strange noises to cry, but once when four men were there she began to sob. They all heard it and started toward us. I knew it wouldn't take long to kill me, but at things the Boche left, but there's only enough for one. It's hard to have it so near, but I know what's the duty of an American dog.

August 30th.—Looked for food again to-day. No use. There is water in a big bucket and the child and I drink



"Hello, rascals; playing at war?" "How can we? No one wants to be the Boche!"

least I'd do what I could. I stood up with my teeth showing and snarled at the first man, whose face was like a red mask, all scowl and wicked grin. He aimed a kick at me and I buried my teeth in his great leg. Then I saw him raise his bayonet. But one of the other men caught his arm and stopped him. He had a kinder face, and it was he who managed to pull the others to the door and get them to go out on the street again. Then he came back and, though he had saved my life, I wouldn't let him come near the baby. He was too much like the others. I think he understood, for with his gun he pushed chocolate and biscuit toward the little girl. Then he went away, too.

August 29th.—I'm growing weak. There's no use going away to hunt for food. I know there isn't any. The child is all right so far. She eats the

from it. I shan't last long. I wouldn't mind so much if only they could know I didn't die a coward. I hope they find my French baby in time.

August 31st.—There is a noise in the street. I hope some one finds the child. I can't even bark, and her food is almost

given out.

September 3d.—I didn't expect to know how things came out, but after all our men came down in the cellar. Later I found that the kind German had written "Kind und Hund" beside the door in chalk as he went out, so that whoever came to the town next would go down to look for us. I heard them coming, but I couldn't raise my head. They picked up the baby like a lot of mothers. "She's all right," I heard them say; "scared and sleepy, but she's been fed. Look! there's a piece of biscuit in her hand still. How'd

that happen, do you think?" Then two of them knelt down beside me and felt me with their hands, and when they spoke they sounded as though they couldn't believe it. "The poor beast's done in," I heard one say. "Starvation . . . and with food right beside him all the time!" "It's Macdonald's Scrags!" shouted the other, who'd just recognized me, "old Scrags." And then it seemed as though he couldn't say any more. I don't remember much what happened. They gave me things to eat and one of them poured burning water down my throat from his flask, and some one brought Sergeant Mac. I tried to crawl to meet him, but he ran forward and lifted me up in his arms with the tears running down his face. Tired as they were from marching, they took turns carrying me all day in their arms. The baby they sent back of the lines to be taken care of by women. I think they understand that I wasn't afraid, for all the regiment—I mean the ones that are still here, for lots of them seem to have stayed at the front-crowded around me and tried to pet me at every rest till Sergeant Mac wouldn't let them touch me any more.

September 6th.—We are in billets and I have most of my strength back. Every one acts as though they'd never seen a dog before, and some one gives me something to eat all day long. To-day a thing happened that's made me feel very proud and happy. I was with Sergeant Mac and perhaps a dozen other men when Sam Leary came by. He tried to act as though he didn't see me. Suddenly I heard Sergeant Macdonald's voice like a pistol-shot. "Sam! You owe Scrags here an apology. You've miscalled him by every name you could think of, and you'd better say after me, 'I was a liar, you're the best man in the regiment, Scrags!" I felt embarrassed, and Sam looked around to see if he couldn't get out of it, but there was a look in their eves that meant business. He couldn't meet me square in the face at first. "I was a liar," he said word by word as if they hurt him. "You're the best man in the regiment, Scrags," and then all in a rush and as if he'd forgot about the others and was only talking to me, "and that's the truth, and I'm glad to have said it out to you!" I went over and licked his hand.

ANNA'S BROTHER BECOMES AN AMERICAN

A True Story Told by Allene T. Wilkes of The Vigilantes

ANNA is a plump, rosy-cheeked young Jewess who works in the office of a public stenographer. During the two or three years in which she has rapidly, and somewhat inaccurately, taken my dictation, I have become acquainted, by hearsay, with her family and friends. It was on a day of last June that I first saw Anna's brother.

The office seemed unusually quiet as

I opened the door. Anna was alone in the room and her machine was still. She sat doubled up, with her back to me, her head resting uncomfortably on her typewriter desk. When she slowly lifted her face and turned I saw that the red had gone from her cheeks and was centered in two circles around her black eyes. The plumpness, too, had melted away, leaving her face thin and drawn.

When she saw me she said nothing, but put her head back on the type-writer desk and began to sob. I sat down near her and after a little while she told me the cause of her distress.

It was Joe.

Joe, as I knew, was the adored son and brother in a family of women. Joe



From a drawing by Poulbot Courtesy of Red Cross Magazine

"There you are again in a fine mess!" "But, mother, what can you expect? War is war, you know!"

was handsome, he was smart; some day he would make much money. He was their pride and their hope for the future. If I had also gathered from her tales of him that Joe was selfish, lazy, and vain, it wasn't Anna's fault. She never suspected that these traits belonged to him.

Now Joe has been conscripted.

After telling me this, Anna raised her head from the desk, and the rest of her story came in a rush of grief and indignation. They had heard the day before that he would have to go, and they had cried all night. Her mother had cried, and her little sister, who was Joe's slave,

had cried. All of them had refused to go to bed. Even Joe had cried.

"It was something awful to see him," Anna told me, quite overcome at the remembrance. "When he wasn't crying he cursed the government. He says the United States is worse than Russia and he is sorry we ever came here. He says he won't go and get shot. If they want him they will have to come and arrest him. He'd rather go to jail than be put in the Army to get killed."

Her tears were burned up by the remembrance of Joe's words. Her own

indignation was flaming now.

"What do you think of them coming and taking a man out of his home and making him fight when he don't want to? I think it's a crime. Don't you?"

"My brother went," I told her. "He didn't wait to be conscripted."

But that only reminded Anna of an-

other of Joe's grievances.

"It's all right for the rich fellows they get to be officers. Joe says all the dirty work comes on the enlisted men. They don't stand any chance."

"My brother isn't rich and he went in as a second-class private." I was very proud of the fact—but it made no

impression on Anna.

The pleasant, easy-going country to which she and her family had fled years before now demanded something of them and nothing could exceed their sense of abuse. It was to America, the "land of the free," that they had come and it had never occurred to them that Joe might have to be sacrificed to safeguard that freedom.

Upon my next visit to the office I found Anna with her hat on, weeping hysterically. "Joe's marching to-day," she sobbed. "All of them that were conscripted are marching. I've got to go and see him."

"'Very well," I agreed, calmly. "I'll

go with you."

We ran the last block that brought us

to the Avenue, where some one told us that the men were passing. Ran hand in hand, dodging through the crowd on the sidewalk until we had reached the corner where Anna was to meet her family. They were waiting on the curb; Anna's sister, who was thin and dark and eager, and her mother, a little woman with a seamed and wrinkled face and a very black wig. The band wasn't playing, there was no cheering, and they weren't soldiers out there they were just men. One irregular line after another of silence—men who were being sent to prepare for a fight that some did not want to make.

Then there was Joe! He walked on the end of a line and his mother saw him before he came to us. With a cry, in a language that I couldn't understand, she ran back to meet him and took his hand.

Later I heard Anna's version of the trip to Yaphank. Joe had cried even after they had put him into his uniform, and he had refused to eat the food they gave him. Anna was half frantic with apprehension for him and fear for the future of the family, now he had been taken from them. She kept repeating over and over again, "I don't believe in this war."

I tried to get her interested in her work, but she was, for the time, quite useless as a stenographer. So many mistakes occurred in the manuscripts she copied that I was forced to find some one else to do the work.

It was over a month before I again went into her office. Then I found her grinding out circulars on the multigraphing-machine. She stopped and looked up at me with one of her beforethe-war smiles.

"Joe's off my mind," she told me.
"He's the best-looking fellow in his company. He seems two inches taller now, but I guess it's just because he isn't so fat."

"You have been out there to see him?"

"We went twice—mamma, the kid, and me. It's some sight!" she added, thoughtfully, then: "The first time we went loe was carrying away garbage from the tent they cook in. He never so much as lifted his finger at home: used to call to the kid to find his things for him and left them all around for her to pick up when he went off in the morning. She began laughing when she saw him carrying that garbage, but he soon shut her up. He told her he had a millionaire's son for a bunky—that's the feller he lives with—and that he carried garbage, too. Joe don't seem to mind what they make him do out there. All the fellers are working pretty hard."

"Then your brother finds there isn't any difference made between the men who have money and those who are poor!"

"He said you can't tell them apart. One private is as good as another and one corporal is as good as any other corporal, and it's the same all the way up. He says the officers don't put it over the men, either, though they are strict and there is a lot of saluting and things like that. Everybody gets a chance. Joe's smart. He's been studying and he's going to be a corporal. He'll go right up to the top. He told mamma he would."

"Perhaps he'll be a general," I suggested.

Anna didn't see the humor of this.

"Maybe he will," she agreed, "if the war lasts long enough. Joe's pretty smart."

It scarcely seemed fair to turn her thoughts back to a disagreeable past, but there was one point I wanted made clear.

"You told me once that your brother talked against the government. Does he feel the same way now?"

"He? No, Joe didn't understand then."

"Then he isn't sorry he was con-

scripted?"

"Sorry?" Anna's scorn was real. "Well, I guess not. Joe's like all the rest of them now. He's out after the Kaiser. He said a funny thing when I went out to see him. He said: 'We've lived in America a long time, but I didn't know I was American 'til I was conscripted. It isn't what I want or what you want, Anna, that counts now. We're in this and it's got to be fought to

a finish!' So he's satisfied to be there learning how to fight. Joe's all right. Even mamma says the camp life's done him good. Of course, sometime they're going to send him to France; but Joe says it isn't up to me to be worrying about that now. My job is looking after the family while he is away. And somehow"—Anna's face was tranquil when she said it—"somehow I'm glad Joe isn't a quitter. How is your brother!"

LEFT BEHIND¹

John Farren's Christmas Wasn't So Lonely, After All

By John Garth

DRIVATE JOHN FARREN, of Seattle, glanced listlessly out of the barracks window and sighed. was not a very cheerful view. The snow drove past, veiling and softening the raw outlines of the building across the cantonment street. It had been falling steadily all night and Farren was tired of the monotonous brush against the glass. It took very little to tire him to-day. Two months of isolation in the contagious ward of a camp hospital is apt to weaken nerves as well as body, and Farren had come out only the afternoon before.

A laugh from the other end of the room, loud, hearty, a little strident, brought a frown to his face and made him rise languidly on one elbow to glance across the row of neat cots at a group of men in khaki in the farther corner. There were six or eight of them, all bright-eyed and alert. Their uniforms were a trifle new, perhaps, but already there was a touch of the soldierly in carriage and bearing.

Yet Farren, after a single glance,

dropped back on his cot with a pang of bitterness in his heart. That was the very corner where he had been wont to gather with his chum, Dick Harley, with chuckling, smiling Bruce Ballard, with lank, taciturn MacComber, and a dozen other of those men whom six months of close association had transformed from strangers into the most intimate of friends.

Where were they now, those men who had come to mean so much to him? In France, probably. He could not tell. He knew only that while he lay in the hospital his regiment had gone. He had come back yesterday to the barracks which had been his home for months, to find it full of strangersstrangers who had acquired already an air of possession. And in those first bewildered moments there came to Farren a lapse to the sensation of his own early days in camp, when every face was strange and every trifling experience something to meet cautiously, experimentally. It seemed almost as if what followed had been a dream, as if he himself were again the rawest sort

¹ Reprinted through the courtesy of Boy's Life.

of a rookie with all his training ahead of him.

The newcomers had not been indifferent deliberately. It was simply that they had already formed their little cliques and friendships, and, with Christmas day at hand, there was the exciting lottery of leave to occupy them, the interest of Christmas letters and Christmas parcels to fill their minds. An added obstacle, too, was Farren's lassitude and weakness, which made the mere act of friendly overture an effort he could not bring himself to tackle. So he simply slipped back into his place, silent, reserved, and desperately lonely. He didn't even try for leave, Of what use would it be to him, who knew no one in the East and had no place to go? And now, on Christmas morning, he faced a day which would be no different from other days—which would be, in fact, even more desolate in contrast to the hilarity of others.

For three whole days not a single line had come from that distant Western city. The neglect hurt and bewildered him, and the sight of those other more fortunate fellows over in the corner brought more than a touch of bitterness to his soul.

A lump rose in Farren's throat, and out of the sheltering darkness there rose a picture of home. There were the dear, familiar faces in that picture, shadowy, familiar objects in its background. And because Farren was young and rather weak and very lonely, he clung desperately to the illusion, quite failing to hear the click of a door opening or rapid steps across the bare boards. The footsteps ceased abruptly and a low, eager voice broke through his reverie.

"Jack, are you asleep?"

Farren looked up; he blinked dazedly. Beside the cot a boy of fifteen looked down on him—a red-cheeked, dark-eyed boy with snow powdering his mackinaw

and clinging to hair and lashes. Farren's eyes widened, his lips parting in a smile. "Why, Billy Grafton!" he exclaimed, struggling to a sitting posture. "When did you blow in?"

"This minute. I've just come from the hospital." He caught the man's thin, white fingers and squeezed them



From a drawing by Poulbot Courtesy of Red Cross Magazine

"Never mind; even if you don't see Santa Claus, perhaps we'll see a Zeppelin!"

tightly. "I am glad to see you out!" he exclaimed. "It's been perfect ages!"

"It has that," Farren agreed, with a wry smile. "I began to think they were going to keep me there forever."

"How are you feeling?" asked the boy, sitting down on the side of the cot. "A little rocky yet?"

"Sort of," nodded Farren. "I'll pick up, though, in a day or so. It—it just seems a little queer getting back and finding . . ."

A roar of laughter came from the far corner of the room, and he broke off, wincing. The boy, following the direction of his glance, nodded comprehendingly.

"I know," he said, in a low tone. "It's beastly! But maybe they'll send you after them. We—we saw them off at the station. It was great, but it made me feel—sort of queer. They gave us all sorts of messages for you—Dick and Mac and Bruce, and all the others. They said . . . "

He paused. Farren had turned abruptly and was staring out at the driving snow. For a second the boy hesitated. Then one hand reached out and gently touched the other's sleeve. A moment later his voice, elaborately casual, broke the silence.

"Con you got loose this

"Can you get leave this afternoon, Jack?"

"Leave? What for? What would I do with it?"

Farren's tone was dull and listless, but his face softened a little as he looked into the boy's eager, smiling eyes.

"Don't you worry about that," Grafton answered. "We'll see that you have enough to do. I'll bet the old man would let you off now if you asked him. You've been sick, and all that, and I don't believe you're fit to do any work yet. Come and try. We want you for all day. Larry's waiting outside with a sleigh."

Farren hesitated a moment, then stood up slowly. His curiosity was aroused and the depression that had weighed down his spirit was lightening. "What the deuce have you fellows got up your sleeve?" he asked, doubtfully.

"That's a secret," grinned Billy. "You just go and get off for all day and

leave the rest to us."

Farren smiled back, a pleasant glow stealing over him. At least there was one person who seemed to care whether or not he spent Christmas lying around the barracks. His glance strayed to Grafton's legs, neatly incased in khaki.

"You're all dolled up in your Scout clothes," he remarked, reaching for his

overcoat.

"Of course I am! This is a Scout stunt. Here, let's hold it for you. Where's your hat? Oh, I see. There! Now, let's get going. We've got a lot of things to do yet, and it's getting later every minute."

He slipped an arm through Farren's, and together they walked the length of the barracks and out into the storm. As the door closed behind them the man was conscious of a curious sense of relief, as if in that act he had shut behind him, also, a host of memories and regrets and longings. His eyes brightened and a faint color came into his cheeks. Life wasn't such an entirely hopeless business, after all, he thought, as he tilted his hat against the driving snow.

There proved to be no difficulty in getting leave for the day, and almost before he realized it they had reached the cantonment entrance and stood beside a sleigh in which sat another boy in khaki, whose greeting was quite as enthusiastic as Grafton's had been. And presently, tucked between the two, thick furs drawn up to his chin, Farren relaxed with a contented sigh. The snow drove against his face, bringing the blood tingling responsively to his cheeks. The merry jingle of bells sounded in his ear. On either hand the white countryside swept by.

Pleasantly mysterious, too, was their destination. He tried to wheedle something out of the boys, but both flatly refused to give him any satisfaction. In the village they made several stops, where bulky parcels were tucked into the back of the sleigh. Farren supposed that they would go to the home of one of the boys, where he would probably be invited to take part in the family Christmas dinner. But to his surprise Larry Dillon drove straight down the village street and out into the country again.

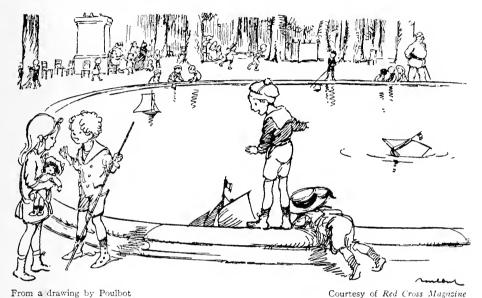
"Look here, son," he said, with mock

severity, "you're not going to try any kidnapping stunt, I hope. Don't forget I've got to report back at camp before nine o'clock, or it 'll be the guardhouse or worse for mine."

Dillon grinned. "Don't worry," he laughed. "We'll return you before that

aged Scoutmaster, Mr. Atherton. In this capacity they came to know each Scout individually, a few of them intimately. Not one, so far as Farren could recall, lived as far out as this.

His bewilderment increased when the cutter left the turnpike and turned into



"Ya, von Tirpitz, now look at your boat!"

in first-class shape, charges paid and all the rest of it."

"Only the parcel will be a few pounds neavier than when it was posted," chuckled Grafton.

Farren smiled, but inwardly he was puzzled. So it was a Christmas dinner, then—but where? In the earlier days of training he and his chums in the company had been on familiar terms with the Scouts of Midvale. A chance encounter in the village led to his attending one of their weekly meetings with Dick Harley. Both young men had been Scouts themselves not so many years ago, and it took little to revive their interest in the movement. The boys were thrilled, of course, by their presence, and almost before they realized it they were installed as special assistants to the hard-working, middlea narrow side-road which led back into the hills. It wound through bits of woods, past white level patches which might have been swamp or meadowland, or between bush-strewn pastures. The storm had lessened a little, and presently the red front of a low farmhouse loomed warmly through the snow. But they passed that, too, and a little later, when the big weathered barns had been left behind and Dillon pulled the horse aside into a narrow, twisting track, Farren gave up all speculation.

The road was steep as well as narrow, and the horse took it at a walk. On either side towered great pines and hemlocks, their laden branches sweeping almost to the ground. Yet here and there one could glimpse a vista of close-set ranks of dark trunks, standing out sharply against the snow. Still

climbing steadily, they made a turn, and presently another. Then the track leveled abruptly, and in another moment they came out into an open space

and stopped.

"Well, here we are," said Grafton, throwing aside the fur robes. They stood on a high plateau which looked down on Midvale. From it on fine days one could no doubt get a wide view of hill and dale and open country. But Farren was not thinking of the view just now. His attention was on the structure of logs which stood before him, nestling against a background of pines. It was a real log cabin, long, low, with an overhanging roof and a great stone chimney rising at one end. Out of the chimney smoke curled and the tang of burning wood was pleasant. As he stared, heedless for the instant of Dillon's question of how he liked it, the door burst open and a horde of boys in Scout uniform burst out pell-mell and clustered around the sleigh.

"Merry Christmas!" they shouted, exuberantly. "Merry Christmas, Jack! How's the boy? It's great to see you again. Lay off him, you roughnecks; don't paw him to pieces. Give him a chance to get his breath. He's been

sick."

Farren grinned as he stepped from the sleigh into the throng of dancing, excited boys. "Oh, I'm not an invalid," he laughed, ruffling one boy's hair and slapping another on the back. "You fellows put one over on me this time, all right. But how did it ever come to be here? You didn't build it yourselves, did you?"

"We sure did!" affirmed Grafton, with a touch of pride in his voice. "We worked on it all fall. Some job, too, believe me! The reason you never heard anything about it was because we wanted it to be a surprise for you and Dick and the others. But before it was finished they—they went, so

you re the only one left to take part in the housewarming. Come ahead in and look over the joint. Ted, hold the horse a minute, will you?"

He took Farren's arm, and with Dillon on the other side and the other boys trailing behind, they tramped through the snow to the open door and stepped

inside.

And there they paused, the man surprised, fascinated. He had been prepared, no matter what he found, to show surprise and approval if for no other reason than to satisfy the boyish pride of the Scouts in their achievement. But as it happened no pretence was necessary; his emotion was entirely genuine and very keen. His first feeling, indeed, was one of amazement that these boys could have accomplished such a perfect piece of workmanship.

The interior was a single room some twenty-five feet long and more than half as wide, the walls of pine logs carefully trimmed and notched, with joints made tight and even with cement or Opposite the door yawned a cavernous fireplace of rough stone in which a pile of four-foot logs roared and crackled. On either side, against the end walls, stood a double tier of wooden bunks. Over the fireplace hung a fine pair of elk horns, and here and there above windows or on the walls were other horns of moose, caribou, and deer. There were several bearskins on the floor, shelves containing tinware and dishes, several comfortable armchairs, a heavy table now piled with packages and boxes. And hanging from the rafters or festooned about the antlers or along the walls thick ropes of hemlock, mingled with glossy mountainlaurel, lent a festive note to the picture and filled the room with the pungent fragrance of Christmas-tide.

The cabin resounded again with a babel of talk and laughter, which presently merged into a bustle of preparation, for it appeared that a regular Christmas dinner was to be cooked and served.

Farren was eager to help, but his offers were refused and he was ordered to make himself comfortable in a chair near the fire while the others were busy.

"Of course, if you see anything being

the fireplace. The fire had been allowed to die down, and a glowing bed of coals raked forward to accommodate the various cooking operations which were going forward in every available corner of the great stone hearth. Sweetpotatoes boiled merrily in one receptacle; onions in another. From a heavy



"Leave him alone. Since he won't fight with us, he shall be a Bolshevik!"

done wrong, you can draw our attention to it," said Larry Dillon, his eyes twinkling. "A fellow can't remember everything all the time."

"I guess you'll remember a heap more than I should," laughed Farren. "What I don't know about cooking would fill a large volume."

"We're none of us experts," admitted Dillon. "Still, I reckon we'll make out somehow."

In spite of this modesty the work went forward in a business-like manner which betokened either uncommon culinary skill or the possession of a good deal of expert advice. Farren drew a chair near the fireplace and watched interestedly.

Gradually the interest centered around

iron crane above there hung a large kettle from which the pleasant aroma of coffee was just beginning to rise. These, however, were the minor details of the banquet, interesting as accessories, but of no real importance compared with the principal dish which occupied the center of the stage and absorbed the anxious attention of the entire assemblage.

In the middle of the hearth stood a heavy iron grate supporting a large tin oven. Grafton and Dillon squatted before it, each holding an iron poker with which, at frequent intervals, he raked forward fresh coals to replenish the heap beneath the grate. And at intervals almost as frequent one or the other opened the oven door a crack to

peer within. Their movements were followed anxiously by every Scout not otherwise fully occupied, and there was no lack of advice of one sort or another from the many onlookers. This was received by the two cooks with contemptuous jeers, but there was, nevertheless, a slight touch of tension in their manner, a decided caution of movement, a keen attention to details. For in that oven, trussed, stuffed, already delicately browning, reposed—the turkey!

"Mother wanted us to have it cooked at home and just warm it up in the cabin," explained Grafton to Farren, with a touch of scorn. "But what's the use of having a turkey if you can't

smell it cooking!"

"There's nothing like it," agreed the soldier, sniffing the air appreciatively. "Doesn't it make you hungry, though?"

"You've said it!" came in unison from several lips. "You're sure it won't get burnt, Jack?" asked Ken Porter,

who had charge of the onions.

"What do you think we're sitting here watching it for?" retorted Grafton, with some heat. "You look after those onions and don't worry about the turkey. I'll bet you haven't made the cream sauce yet."

"I was just going to."

"Well, get busy. This bird will be dished up in twenty minutes, sharp, and we want all the other grub ready by that time. How are the potatoes, Jimmy?"

"Just about done."

"Set 'em off to one side, then, and about five minutes before we're ready you can peel 'em and put 'em on a plate. When he gets out of there, Shorty, you stick on the plum pudding to heat."

That twenty minutes dragged interminably, but the waiting came to an end at last. When the other accessories of the banquet had been placed on the table Grafton and Dillon together lifted the oven from the fire to the hearth and removed the steaming fowl to a platter placed in readiness. There was a moment of gasping suspense as Larry brushed one hand against the hot metal and nearly dropped his end of the load. But he hung on, and the calamity was averted at the expense of a red ridge across three fingers. A moment later the turkey was placed triumphantly on the board and the boys scrambled to their places with sighs of mingled relief and anticipation. No turkey, it seemed to them, had ever been so plump and juicy, so tender, so crisply brown, so succulent of dressing. The creamed onions were delicious, the potatoes were done to a turn, the brown gravy was plentiful and thick. They ate and ate, and passed their plates for more. When the first pangs of hunger had been assuaged, jesting and banter began to run up and down the table. compliments phrased in the inverse term of boyhood were showered upon the cooks.

John Farren's enjoyment of the meal was complete. The food really was delicious, but better than any material pleasure was the mental relaxation which had come to him. His troubles had quite vanished, his laugh rang clear and unrestrained, and he joined in the joking give-and-take with all the mischievous abandon of a boy.

When the turkey lay dismembered on its platter, looking like the wreck of some derelict, when the plum pudding had vanished save for a few crumbs and every other dish had been scraped quite clean, the boys arose with sighs of repletion and content and gathered round the fireplace. Fresh logs were piled upon the embers, skins were dragged up, and they crowded into a semicircle before the blaze, with Farren in the center.

Outside the early dusk was falling; now and again the wind howled eerily in the chimney; but inside the cabin were warmth and cheer and comradeship. As the dancing flames lighted up the circle of boyish faces, some flushed and drowsy, others bright-eved and alert, each one of them meeting his own glance now and then with a friendly smile, Farren thrilled oddly. Grafton sat close on one side of him, little Bennie Reed nestled against the other, and presently, when the small boy began to nod. Farren slid an arm around his shoulder and drew the tousled head down upon his knee. How could he have thought the world cold and lonely, he wondered.

They did not sit long in silence. There were jokes and laughter, a story or two, and presently some one started up a song. But all too soon came the jangle of bells and the snow-muffled stamping of the horse, brought up from the red farm-house below.

"I hate to break up the party," said Grafton, scrambling to his feet, "but you know we must return you on time."

"I know." Farren stood up, smiling a little at Bennie's dazed awakening. "I'm not a bit keen to leave, but of course I must."

It was not easy to tell them what that day had meant to him. They could not understand it all; he hoped they never would. But when he had finished at least they knew that he was grateful. There were a brisk bustle of handshaking, a chorus of good-bys, and he was in the sleigh, looking back at the open door filled with grinning faces and wildly waving hands. Then the faces blurred into mere outlines, black against the glow of the fire, the friendly voices grew fainter, there came a turn in the path, and the cabin vanished.

An hour later he entered the barracks with a brisk step. His face was flushed, his eyes bright, a retrospective smile curved his lips. He had his overcoat half off before he discovered, lying in the

middle of his cot, a large square box and a pile of letters. In an instant the coat slipped unheeded to the floor and he pounced on the top one, which was in his mother's hand.

"My dearest boy" (it began). "I am writing this early in hope that it



From a drawing by Poulbot Courtesy of Red Cross Magazine

"Four days' furlough, indeed! What for?" "To spend them with my wife, Captain!"

will reach you with the box on Christmas Eve, and perhaps make the day seem a little less lonely than I'm afraid it will be . . . "

Farren raised his eyes for an instant and his smile deepened. "I wish she could have known," he murmured.

Private John Farren glanced out of the barracks window and smiled. The storm had ceased and the snow blanketed the cantonment, piled up in drifts, hummocks, and ridges. It clung to window-ledges, half blocked doorways, hung in masses over eaves. And out of a cloudless sky poured the morning sun, glittering on the snow as blindingly as if the white expanse were spread with diamond dust.

Farren threw out his arms and drew a long, deep breath. The smile still lingered on his lips, but there was a far-away look in his eyes. The stretch of gleaming white had vanished. Instead he saw the cabin hung with balsam boughs, the roaring fire, the close circle of friendly, boyish faces. He sighed gently, and the smile became whimsical, tender.

"They're great kids," he muttered. The door slammed and an orderly entered, stamping the snow from his

feet. He came straight to Farren.

"Wanted by the commandant at once," he said, terselv.

"Very good," the man returned.

Five minutes later he stood before the officer's desk, straight, erect, impassive, giving no outward sign of the

vague disturbance within.

"A troopship sails to-morrow night, Farren," began the colonel, without preamble. "I've had word that it will be another month before your regiment leaves its present location for the front, so there'll be time for you and a few others who were left behind to join it. Can you be ready in an hour?"

Farren flushed, then paled, but his voice was steady. "Yes, sir," he re-

turned, quietly.

"Very good. The adjutant will give you directions about assembling. That's all."

Farren saluted, wheeled, and left the

But on the door-step he paused an instant, blinking in the glare, and grinned. "Not such a bad little ol' Christmas, after all!" he told himself as he started on again.

"ONLY ONE OF US CAN GET OUT— AND OUT YOU GO"

The Splendid Sacrifice of an American Tank-Driver

ORP. HAROLD W. ROBERTS. → Company A, 344th Tank Battalion, United States Army, was a San Francisco boy who will be long remembered as one of the most gallant of Uncle Sam's fighters.

During a charge on the Germans, Roberts was driving a light tank which plunged into a water-filled shell-crater. Water and mud covered it; only one of the two-man crew could escape. Roberts pushed his friend, Sergt. Virgil Morgan, out to safety, saying, "Only one of us can get out—and out you go!"

He was just twenty-two when he made the supreme sacrifice, having enlisted at nineteen, following his graduation from the University of California.

Now his father has his Congressional Medal of Honor, America's highest military decoration, awarded on General Pershing's recommendation; and he has, too, this letter from his son's

pal, Sergeant Morgan, describing the last fight:

"Bob, as we called him, came to our company early last summer. Almost at once he was liked by every one in the company.

"He was in my platoon and by his

good work was made corporal.

"Bob and I became very close friends, and when it became time for the sergeants to pick their tank-drivers, I picked Bob. But because he showed up so well as a tank-driver, the lieutenant of our platoon took him away from So as the platoon-leader tankdriver he went to the front and went through the St.-Mihiel fight. never proved a better soldier. was not a minute that I did not try to get him back to my tank.

"Finally, Bob asked the lieutenant if he couldn't drive for me. We were two tickled boys when we got together

again. Immediately we went to the Verdun front in the Argonne Forest sector. All through the drive, until he was drowned, we fought together in our little tank. Little did we both care. We were young, I being only nineteen. Our whole idea was to get Germans at any cost.

"It was on the morning of October 4th that he met his death. It was foggy. We were at the head of a new division in the line. After we left our point of departure and were in battle formation, shooting at everything that looked like a German, Bob looked up

to me and smiled, saying:

"'Dink' 'I wouldn't miss this for a

thousand dollars.'

"We went along in the fight for about a mile, when we saw on our left a tank standing still. A doughboy came crawling along to our tank. Bob opened his door and the doughboy yelled that the tank on the left was struck and wanted protection from a German machine gun, pointing toward the trench woods.

"Off we darted amid bursting shells and the sound of machine bullets lighting on our tank. Thinking that the enemy was in the bushes ahead, Bob speeded up and we plowed right into it.

"In a moment we were turned over and water was rushing into the tank. The back door was the only way to get out because the other doors were buried in the mud.

"Bob's last words were, 'Only one of us can get out—and out you go,' and he gave me a push. I had to be the first out because there are the gunners' doors and the drivers' doors.

"Bob's doors were buried.

"When I came to the top of the water I waited and yelled for Bob. I was as helpless as a baby, because the tank was completely covered with water and I couldn't get back in after him. I cried like a baby and waited, but he didn't come.

"When I came to myself I found that we had gone into a tank-trap. With the machine-gun fire increasing furiously, I had to fall back after waiting

for twenty minutes.

"I made several trips up to the hole afterward, but I took sick, due to the stagnant water, and I came back of the lines, unable to see Bob's burial. But fellows tell me he received one of the finest burials that a soldier could get on the battlefield.

"This is the full account of his death, and I wish to express my regrets with all of you. I never had a better friend.

"And it was because of Bob's push that I am now alive to write this letter.

"Why couldn't it have been I instead of him?"

PIERROT AND THE PUPPY

Two Little Refugees of Ypres

THE rain beat down on the roof of the refectory which served as a temporary hospital for the sick and wounded refugees from Ypres. It was a dreary day, and in the main ward there was not much cheer. Every now and then a muffled sob came from one of the beds and Miss Jackson, the nurse

in charge, would hurry over to administer an encouraging pat to a homesick shoulder. She was a very business-like and efficient woman, was Miss Jackson, but she had a warm, understanding heart.

Perhaps that was the reason she always made an excuse to pass a bed

in which lay a very tiny boy. He looked particularly small and lost in the great bed which had been given to the hospital by the owner of a beautiful old château.

The boy was one of the refugees. His foot had been smashed by a shell during one of the repeated attacks on the valiant city, and as a result his leg

had to be amputated.

Where his parents were no one knew. Miss Jackson felt sure that they were both dead, but she tried to keep the boy's spirits up—for she knew that it was dangerous for him to grow despondent, and she had been successful. Pierre was the life of the ward, and an old poet whose eyes had been put out by a bursting shell called him "Pierrot" because of his gaiety, with its undercurrent of sadness.

To-day for the first time Miss Jackson approached Pierrot's bed without hearing a cheery, "Bon jour, Mees Jacqueson." "Perhaps he's asleep," she thought. But no, as she stood over the little crumpled figure she saw the shoulders shake, and a furtive hand creep to wipe away an equally furtive tear.

Outside, the rain came down and gray shadows lay hidden in corners, waiting for the early evening. All at once she heard a sound in the hallway. It was a sound that was not usual in the hospital. Miss Jackson stepped quickly to the door, opened it, closed it. . . .

Pierrot in his bed had been expecting the kind, mothering caress. He opened a tear-wet eye and looked about him. No Miss Jackson. Then he decided to watch the door.

That was a wise move. In a few minutes Miss Jackson returned—and in her arms was a bundle, a rather small, squirming bundle. She walked straight to Pierrot's bed and stood smiling down at the little boy.

Pierrot's hand went to his head in the salute he had learned from his

soldier father.

"How would you like to be a godfather, mon petit?" asked Miss Jackson.

"I—oh, am I not trop jeun? I could not be parrain to un bébé—unless it were a very tiny bébé. Then I could."

His eyes were appealing for permission. His lonely heart longed for something to care for—but the humility that the good priests had taught him made him fear to ask too much.

In answer Miss Jackson put the bundle into the little boy's arms. "I think perhaps this bébé is small enough, Pierrot. It is a little dog without any home, and you shall be its godfather and it will be your friend and your companion."

Out of the shawl a woolly ball emerged on wabbly legs—straight into Pierrot's waiting arms it wabbled, and its inquiring, friendly nose explored the flushed and happy face of its new godfather.

Miss Jackson turned away, leaving the two happy babies together. Later, when she came to say good night to Pierrot, she found them cheek to cheek—fast asleep.



THE SPY-PLANTER

By IRVING CRUMP

A^N anxious little group stood beside the "hen-roost," as the Americans called the movable pigeon-loft. All were Some looked eagerly at the dials of their wrist-watches, some expectantly scanned the cloud-flecked afternoon sky, and some paced restlessly up and down. Among these last was the commandant de centre, who, as he strode across the soft earth, chewed the edges of his gray mustache and held his head downward, as if in deep thought. Cy Crawford, in his leather aviation uniform, and his chum, Rod, similarly attired, stood on the edge of the group. Both were silently watching their timepieces.

Cy looked up. "Five-thirty, sir.

Shall I start, or—"

The commandant faced sharply about and looked into the sky to the northeast. Every other member of the group did likewise.

"Not a feather in sight. The bird is half an hour overdue. Something has gone wrong, that's certain," he said in a preoccupied manner, addressing his

words to no one in particular.

Then, as if remembering that Cy had spoken, "I can't command you to go," he said, "for I know that something has slipped up and that you would be flying into positive danger. I never send a man where I wouldn't go myself—but—but—you can volunteer to go—you can volunteer, and I'll thank you for doing it, for if you come back you can tell whether our plans are going astray or not"; and he looked at Cy searchingly, almost eagerly, with his cold gray eyes.

"Very good, sir. That settles it. I'll go," said Cy, after just the slightest suggestion of hesitancy. He knew as well as the officer that he was probably about to fly on the most dangerous mission he had yet undertaken, and he could not help but reflect a moment before he offered himself. Then, regretting his hesitation, he added, eagerly: "Of course I'll go. I'm sure it isn't as bad as we think. He'll be there. Perhaps the bird has been shot. I'm off, sir. Come on, Rod. Help me get away."

"Oh, the optimism of youth!" sighed the old, care-worn commandant of the aviation station, as he looked after the two leather-clad figures sprinting tow-

ard the Nieuport hangars.

Something had gone wrong. Cy knew that as well as every one else. The carrier-pigeon had been due back at the loft a half-hou; ago, bringing with it a code message from the territory behind the lines of the Huns. On this message hung the success or failure of a daring plan worked out by General X-, the commander of the sector. But the bird had not arrived. The plan was probably a failure. The best that they could hope for was that De Lacy, the spy whom Cy had planted behind the German lines at dawn that morning, was still alive and waiting at the appointed place to be picked up by an airplane. But since his pigeon had not come back, the chances were small indeed that he was still at large.

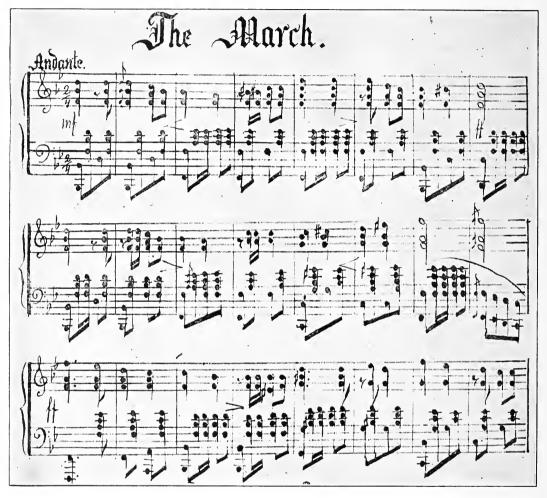
Somehow—Cy had heard that it was through a captured Saxon prisoner—it had been learned that the noted General von K——, the Prince of O——,

¹ Reprinted through the courtesy of Boy's Life.

and several other prominent German officers were to confer in the city of St.-Vincent, twenty miles behind the Hun lines, on the V—— sector. St.-Vincent was far beyond the range of the

guns—to which miles meant nothing. These bellowing, flame-belching fellows could toss an H. E. projectile twenty miles without half trying.

Swift to grasp the opportunity, the



The Gratitude March

This is a march of gratitude, composed by a little Polish school-boy, Witold Mackienicz, and dedicated to the school-children of America. According to the composer, it tells the story of a little orphan girl whose life is saved by the gifts of American children.

French 75s and the 322s, so that the Huns felt quite safe in their conference plan. But during the last few days American engineers, the first in France, had come up, bringing with them a battery of veritable monsters—sleek, long-nosed "thirteen-inchers"—naval

Frenchmen began to lay a definite plan which was to be marvelously perfected by those magicians in khaki—the American engineers.

The poilus wanted to blow up St.-Vincent—no, they wanted to blow up a particular house in St.-Vincent. Very

good. The Americans would move up the giant guns. But these guns must not be revealed to the German aviators, for if so the conference would be moved to a safer place.

How could they keep the guns concealed? Why, it was perfectly simple for the Sammies. A railroad would be built and foundations laid for the guncarriages—all under cover of the darkness of a single night. At midnight the big guns would be brought up. At three o'clock in the morning they would begin firing. At three-thirty the conferencehouse and several others in St.-Vincent —perhaps St.-Vincent itself—would be gone, and by daylight the guns would be far to the rear again out of the way of German fire that would surely be returned as soon as the scouting aviators found where the big guns were—or had been.

So the plans were laid. But it remained for the French to perfect one little detail—and that was where the hitch came. It must be known to a certainty just which house in St.-Vincent was to shelter the conference, so that with the first salvo it could be destroyed, and it must be known exactly on what night the conference was to take place.

There was only one way to do this, and that was to plant an efficient spy behind the German lines, as in the early days of the war. De Lacy, a daring aviator from the Signal Service, had volunteered to be the spy, and Cy had taken the task of spy-planter.

Before daylight on Monday they started out in Cy's Nieuport, and De Lacy, clad in the uniform of an under-officer of the German Army, helmet and all, was bestowed successfully on the crown of a hill a mile west of St.-Vincent. All day long he worked in that now extremely busy German town, but at mid-afternoon his carrier-pigeon came back to the French lines with no news

save that he was ready to be picked up on the hill at five o'clock.

Tuesday Cy did his "planting" stunt again, and De Lacy spent another day far behind the German lines at the imminent risk of his life, to discover—nothing. Indeed, it began to look as if the Saxon prisoner had been lying, for not a definite thing could De Lacy learn, though he fraternized with arrogant lieutenants and forced himself into the presence of even higher German officers. Back came the carrier the second afternoon, with only the news that he was once more waiting on his hill to be picked up.

What had happened Wednesday on his third venture could only be guessed. Cy had left him safely in the morning. Now it was late afternoon—time he should be picked up on the hill, and still his carrier-pigeon had not arrived. Decidedly something was wrong. Had the pigeon been killed in its flight? Had De Lacy been captured, or had—

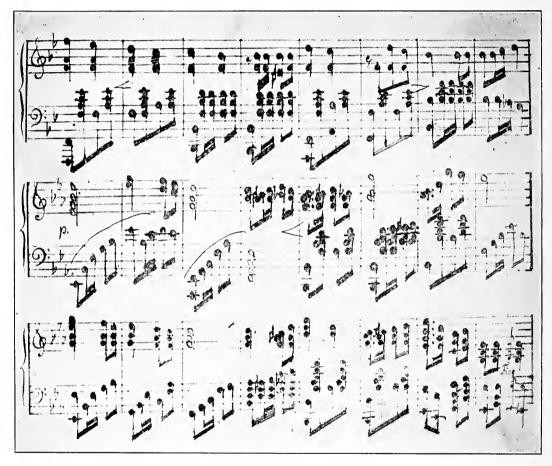
Cy stopped guessing, for he realized he would soon find out for himself the truth of the situation.

With Rod and a half-dozen reserve aviators watching his departure, Cy put his Nieuport into the air like a startled partridge, and in a few minutes was only a vague speck in the northeast evening sky. High up, and lost to those below, the young American flew his big plane across the ridge, and over the valley where the flame-jeweled trench-lines stood out in the gloaming. Then he headed straight for St.-Vincent, twenty miles away. It was a delightful evening for flying, without a hostile plane in the sky. Cy could have enjoyed his trip had he not been thinking of De Lacy and his possible

Dusk was coming on fast, and he had to drop down very much lower as he approached the city, in order to locate the hill whose top had been De Lacy's landing-place. Eagerly he watched below, hoping to catch the spy's signal. But he was not optimistic. Inwardly he felt that the tiny, fluttering, white-handkerchief flag that had attracted him on the other days would be absent

at the figure on the hill waving the tiny white flag to show the direction of the wind. Was it De Lacy? That was the place and that was the signal, but—

Cur - r - r - wang - wang - wang - wang! Thum-ping-p-p-i-n-g!



The Gratitude March

The young author says that it is "dedicate from the Polish school in Archangel to the American Scholars, per thankfulness for their charitable help in the rough hunger."

to-night. Something had happened to De Lacy. He felt confident of it.

Then suddenly there was a white flag—sure enough—being waved energetically. But the figure holding it—was there something strange about it? It didn't look just like him. Something suggested caution. Cy brought his plane lower and gazed more carefully

"Oh! The skunks! The gas-pipe's gone!"

Cy almost knew it was coming. It was a trap, an ambush. That figure with the flag wasn't De Lacy. He had probably been captured. This other man was a decoy to get the aviator within range of a hidden machine gun. Cy had been wise, but not wise enough,

and now he was winged. He was coming down—twenty miles behind the German lines! It was all up with him! He'd be lucky if the machine didn't

catch fire with the leaky gas!

Coolly he shut off the gas and began to glide, heading away from the still spitting machine gun and slipping headon toward a little break in a wooded patch below. In a matter of seconds the Nieuport was bumping along the uneven ground, and Cy, hastily unstrapping himself, slipped out of the cockpit.

He was on the point of scuttling into the now shadowy woods, like a frightened rabbit, when close at hand, to his left, came a sharp "Hist-t-t!" Instinctively he reached for his automatic, but a soft laugh, which he recognized im-

mediately, made him stop.

"Here! Queek! Zis way!" said the voice he knew, and he darted into the shadows to come face to face with De Lacy, in his uniform of a German under-officer.

"How? Where?-"

"No, not now. Come, run—but silently. Hear them. They are coming after your machine. We must hurry—come."

Cy could hear men, eager to capture him, thrashing through the woods toward the open place where his machine had come down, and he ran on swiftly but noiselessly behind the almost phantom-like figure of the crafty French spy.

On and on they hurried through the now thoroughly dark woods. Twice they heard searchers behind them, but both times the artful De Lacy outwitted them. Soon it was black night, with silvery needle-point stars twinkling down at them between the trees. Still the agile De Lacy stumbled on, with Cy close behind him, puffing and perspiring to keep up.

Presently they came to a tree-lined macadam roadway. Here, in the shadow

of a dilapidated hedge, they paused, and De Lacy, crouching beside Cy, looked at him with dancing eyes and a smile that flashed even rows of teeth which stood out startlingly white in the darkness.

"We deed what you call 't'row eet all over on himself'!" he grinned.

"You mean 'put it all over him'!" corrected Cy; "but where— How—

say, I thought they had you."

"So did they. They thought also they have you. But, zip! we have gone once more," he said, gleefully. "They have been after me all day. They are vere wise, my friend. They know I come yesterday. To-day four times I give them the sleep. I know they are after you. I do not send the carrier, because I don't want you to come over and get caught. But they think you come and they wait with my signal. I hope you don't come. hope you do come. You come. I see you are shot. I come to the only place you can with sense make a landing. I guess right. I find you. Here we are. Vere nice, eh?"

Cy could see it all. The Germans had been watching their spy-planting. They had tried to catch De Lacy, but somehow he had given them the slip. They had also tried to catch him, but, thanks to the Frenchman, he had escaped so far.

"What about the conference?" de-

manded Cy.

"Ah, my friend, I am ashamed to confess, but because they know there is a spy about St.-Vincent, that is the reason I can find nothing. Every German has his lips sealed, even against his brother. I can get no news. I am mortified. I have failed. I— Hist-t! Queek! This way."

De Lacy seized his arm, and together they began to slip silently along the hedge like two shadows. There were voices not far off, and the tramp of horses. Presently came the challenge

of a sentry, and more voices.

"Come, we must get well hidden before we discuss what we are to do next. This way. Hurry! We—ah, I know now—I know where we are. Here—through this hedge. Softly, softly. Then crouch low. It is the grounds of the Château de Pollinchove."

Crawling through the heavy hedge that reached out at right angles to the one that fringed the road, there were revealed to Cy broad lawns, shaggy trees, and the black mass of a huge stone building.

"Just the place for us," urged De Lacy, starting to scuttle across the lawn, while Cy followed him cautiously.

In a few moments they came under the shadow of a tremendous stone building, probably, in times of peace, a handsome dwelling, but now rather the worse for wear in spots. Here and there sections of walls were knocked out and one portion was charred and burned where a wing had been gutted by fire.

Suddenly De Lacy grasped his arm. "Here's something worth while. I see a light! Come. Crawl inside! Here!"

With marvelous agility the young Frenchman began creeping toward the ruined wing again. Once there, he made his way among the piles of mortar and debris and, with Cy close behind him, soon worked a way into the very heart of the ruined portion.

Then came the spookiest game of hide-and-seek and stalking Cy had ever undertaken. He hadn't the remotest idea where he was or where he was going. All he could sense was that they were sneaking through one big room after another, and up and down hallways.

Presently, however, they began to hear voices again, muffled now, as if coming through chinks in a broken wall. Here and there they saw flecks of light, where yellow rays filtered in from some other room.

Soon they reached a point where the voices sounded quite distinct. They were voices of German officers, Cy knew that. What they were saying was a mystery to him. But the young Frenchman crouched close to the wall, where huge hunks of plaster had dropped away. and listened intently for a long time. Then with the utmost caution he withdrew, and without a word led Cy back into the maze of darkened rooms and long halls. Soon they found stairs and began to creep cautiously up them. Presently Cy felt a draught of cool air. An instant later they stepped clear of a peculiar doorway, and Cy realized that they were on the roof of the undamaged portion of the château.

"Why up here?" he asked, in a

guarded whisper.

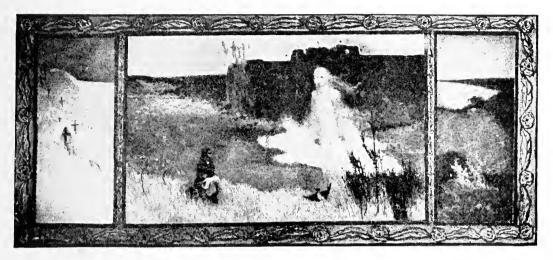
"What? You can't guess? This, monsieur, is ze place of ze conference. Zey are waiting down there now for ze arrival of General von K—— and Prince O——. We have stumbled over it, my frien'—but we have put ourself also in a trap. Listen. Hear them. Motors arriving. Horsemen, too. In a few minutes zis place will be surrounded by guards. All ze leetle butchers will stand outside to keep ozers away, while ze beeg butchers inside plan their plans."

Cy was startled. But he was also elated. They had found the place of the conference! They had stumbled upon the place of all places they wanted to find! Now to send word for the big guns to come into action! De Lacy still had the carrier-pigeon concealed upon him. But, if they did send word, and the big guns were brought into action, where would they be when that first salvo of four shells came screeching across twenty miles of space to blow up the Château de Pollinchove? On the roof! But not after the first shot struck, that was certain!

Crouched in the very darkest shadow

of the broad roof, Cy and De Lacy, with the aid of a subdued beam of light from Cy's pocket flash-lamp, worked out a code message on a tiny piece of silk. This they slipped into a gelatin capsule about which was attached a metal band. When this was ready De Lacy took off his German helmet and, with a twist at the spike, raised a

carrier had reached the loft. They knew their message had arrived and been read. What would the answer be? Meantime, men and more men gathered about the old French building. Motorcars came and went, with lights out and muffled engines. Guards called out and sentinels challenged in hushed voices.



The Fantom of the Death

"The little gerle orphan going to the grave of her starve mother and herselve half dead from hunger, fall for the enfeeblement and see the fantom of the Death"

wire-netting flap cleverly concealed under a gauzy cloth that permitted air to pass in and out. There, crouched quite comfortably, was the carrier-pigeon, patiently waiting to be freed.

Quietly they took the bird in their hands and attached the capsule to the quill of the strongest middle tail feather. Then they stood up. De Lacy held the bird aloft an instant, then let it go, and softly and silently it darted off into the blackness of the night.

After that Cy and the Frenchman waited in utter silence in the darkness on the roof. Ten minutes passed. Below them in the grounds of the château they heard the sound of the arrival of small detachments of troops. Twenty minutes dragged by. They knew the

Then, all attention and eyes fastened on the heavens, they waited. The purring sound became louder and louder. A sudden movement and a startled exclamation from the ground told them that the approaching airplanes had been discovered by the Huns. A moment later men were scrambling about and lights flashed on. Presently a search-light, mounted on the front of a motor, leaped into life and its long finger began to feel about the sky. Another and another snapped on, and in a moment the inquisitive shafts found what they were looking for.

Circling swiftly downward came two huge Nieuports. From each of them a rope ladder dangled. And as an unpleasant background, higher up, there

circled like vultures a dozen other warplanes. It was the bombing escadrille.

Instantly scattering shots of rifles burst out from the ground and men began to scramble about calling loudly. Motor horns began to toot warning, too, and everything was turmoil

To Cy and De Lacy this excitement meant nothing. Their eyes were fastened on the two big planes that swept swiftly down toward them. Those dangling ropes meant their only avenue of escape. Life or death depended upon so very little. If there was the slightest hitch; if they were not picked up by the descending machines, all was over for both of them.

Down swept the first machine. At an easy angle it started to cross the expanse of roof, regardless of the tornado of the rifle-shots that swept up at it. Cy watched it eagerly as he crouched full in the path it would take. On it came, lower and nearer. It was sweeping over the edge of the roof now. The rope ladder almost scraped the parapet. With a cry of triumph Cy plunged toward it, and leaped onto the flimsy lengths, clinging to the rungs with all his might. The next instant the machine regressed and started upward again, clearing the way for the second one, which was swooping toward the point where De Lacy crouched ready and waiting. Cy saw him leap, too, and heard his ringing shout of triumph. Then he began to climb the swing-ladder, and by a violent effort gained the fuselage of the machine as it swept off into the darkness.

Then the bombing escadrille, circling about high aloft, came into action. How many tons of explosives were loosed at once Cy could not guess, but he did know that the detonations were terrific. A blinding glare shattered the blackness of night, and the Château de Pollinchove became the plaything of the high-explosive bombs that were rained upon it.

As he swung over the side of the fuselage and into the cockpit in front of his grinning chum Rodney, Cy could see that the fine old château was being smashed into a veritable shambles by the steady pounding of the powerful explosives. But in spite of the awful sight that this bombing expedition presented, in spite of the flames and the flashing shells and the mad scramble of terror-stricken men below, he experienced a feeling of elation, for he saw in the demoralizing scene the fulfilment of the plans of the fine old commandant de centre which had come so near to being a costly failure.

PAT PUTS IT OVER

Two Rival Patrols; A Campaign for Liberty Bonds; and an Irish Setter Who "Puts It Over"

"YOU must be tired," said Mrs. Terry, as she helped Burgess out of his Scout coat.

"Tired is no name, mother," smiled back the lad. "But wasn't that parade a beaut? And, mother, did you see Carl Giddings's dog? He beats any
*From The Boy Scout Year Book, D. Appleton, publisher.

thing I ever saw. I'll bet he made folks dig deep. The crowds nearly went wild as he passed, but it didn't seem to bother him a bit."

"What dog, Burgess?" inquired Mrs. Terry; "I didn't see any dog."

"Oh, there were lots of things you didn't see, momsey," said the lad,

affectionately. "You were using your handkerchief too much. I had to holler my head off when I passed you to get you to look at me. It was Carl's Irish setter, Pat. You know the big brown dog that is always with him."

"Was that the dog who got the tenthousand-dollar bond from Judge BarBud Barclay safely to shore. I'll just bet that was why the judge gave the dog the subscription."

"But what about the dog and the

parade?" urged Mrs. Terry.

"Well, mother, you know Carl Giddings is sick—has been for ten days. Heard the fellows saying to-day it was



The Breakfast of the Archangel Scholars

"The same girle-orphan receiving in the school every day a nourishing breakfast, do not fear the hunger, but bless from all heart the generous beneficence of the American Scholars."

clay in the last drive?" questioned Mrs. Terry, as she arranged the table for tea.

"Yes, and that's how it came that the Wolves beat us, too," replied the boy. "But we really had no kick coming, 'cause we're all strong for Pat. None of us have forgotten, I can tell you, how he swam out that time at camp, right in a squall, and brought

pneumonia and that they had three doctors last night. Carl is leader of his patrol and, of course, couldn't march to-day with the rest. But when it came time for the parade formation, who should show up but Pat. He wasn't playful, and absolutely refused to race for a stick. He just kept whining and following Carl's Scoutmaster about—Mr. Jones, you know. Finally it

dawned on Mr. Jones what the old fellow wanted.

"'Why, Pat,' he said, 'I know what you want. You've come to take Carl's place in the parade. What stupid things we humans all are!' And in a minute Pat leaped up just like himself again. Mr. Jones got hold of a big silk flag somewhere. Then he took Pat over to the line-up, put the flag in his mouth, and told him to take Carl's place. And he walked right along.

"Of course the Wolves were proud as peacocks, but so were we all. The people cheered, but Pat paid no notice, just jogged on with his head in the air. My, he was a beauty! His eyes shone like anything. I'll bet Carl 'll be proud

of him when he hears of it."

Supper was just started when the door-bell rang. It was Bob Tate, Burgess's pal, and a First Class Scout.

"Special meeting to-night," he said to Burgess. "We're going out to-morrow for repeaters. They're going to extend the contest a day. We went over the top all right, but the National goal's lagging and we must do more than our share. We've got to beat the Wolves, and, boy, oh, boy, it's about a tie just now, I'm thinking. Carl is laid up and he was one of their best workers, so we're giving them a go. We're sorry, of course, that he's sick, but we're going to win this time."

"You bet your life we will!" cried Burgess, as he hurriedly ate his sauce. "They trimmed us at basket-ball and in the track-meet, but—"

"We would have beaten them on the Second Liberty Loan, though," interrupted Bob, "if it hadn't been for Judge Barclay's big subscription."

"Say, Bob, I believe I know how that happened," said Burgess, as the two boys hurried out the door. "Don't you suppose it was because Pat saved young Barclay from drowning last summer at camp? You know the judge had al-

ready bought fifty thousand dollars' worth of bonds before Carl went to see him."

"Yes, but Carl would never have thought of going to Judge Barclay if the judge hadn't 'phoned for him to come and to be sure to bring the dog," declared Bob. "Did you ever hear about what the judge did? I heard the Scoutmasters talking about it. The old judge looked straight into Pat's eyes and said: 'Pat, old fellow, if it hadn't been for you I'd have no boys at all to-night. A German shell got my big lad a few days ago, and if you had let Bud drown I'd have been a lonesome old man tonight. I've decided to buy a few more bonds and I want to buy them of you.' He patted Pat's head and Pat barked, as he always does when you speak to him, just to let you know he understands you perfectly. Then the old judge wrote a check for ten thousand dollars, sealed it in an envelope and told Pat to take care of it, and put it in his mouth. Pat carried it all the way to headquarters and the Wolves won. Carl was too pleased for any use, and the boys all chipped in and bought Pat a new collar."

"Well, in a way it was luck," said Burgess, as they went into headquarters; "and it won't happen again, for the judge has gone absolutely to his limit. He told my father so, and, besides, Carl is sick in bed."

It was very quiet at the Giddings home that night. Everything was dark but the big front bedroom upstairs and the front-hall light. Pat had made numerous trips to the back door and had scratched patiently in his accustomed manner, but there had been no response. It puzzled him, for he had belonged to the Giddings family almost as long as Carl himself and in all that time he couldn't remember that they had ever before forgotten to give him his supper. He was especially hungry,

too, after his long walk through the hot, crowded street in the bond parade.

Finally he lay down on the front step, his head between his paws and a deeply puzzled expression in his eyes. For seven days he hadn't seen his beloved Carl. Every time the door had opened he had sprung to his feet, but each time Mrs. Giddings had said, "No, Pat, you mustn't disturb Carl." He had eyed closely the strange little man with the black satchel who came twice each day. He had smelled the odorous black medicine and somehow it had frightened him.

At nine o'clock this evening two strange machines came, each bringing doctors, and in a few moments a big taxi left at the door Mr. Giddings, who had been East on business but had been hastily summoned home. He hurried into the house without so much as noticing Pat pleading to be let in. Up the stairs he went three at a time, leaving the front door open. Pat gazed after him through the screen door, but all he could hear was a "'Sh-h-h, John!" Then there was the soft closing of a door, and he was left alone again.

Half an hour later—it had seemed a long time to Pat—Mr. Giddings and the two doctors stepped quietly onto

the veranda.

"And what is your judgment, Doctor?" asked the father, anxiously.

"He is a very sick lad," the doctor returned, quietly—"a very sick lad. He is naturally very intense and has been working under a great strain. Doubtless he has worried about his brother's going to war. I think the crisis will come before morning; if not, surely by noon to-morrow. I'm glad you've come. I'm dead for rest. I must go to bed; but if the lad gets worse call me. Doctor Ellington says we are doing all that medical science can do and must now trust to the boy's native vitality to save him. But what's

all the bond stuff he keeps talking?" he asked, curiously. "He seems to have some burden on his mind, some important thing he was to do, and couldn't."

"Been selling bonds," said Mr. Giddings, "and he is so intense. There has always been a great rivalry between his patrol and the Eagles. He is patrolleader of the Wolves and I presume he's been feeling great responsibility for their success."

"Hasn't he a pal," questioned the doctor, "who could talk to him and put his mind at rest? Who is his bosom friend?"

"Here he is," said Mr. Giddings. "Pat, here, is his best pal, but he doesn't know much about bond sales, I guess, although he's a good deal of a Scout, the boys tell me."

The doctor leaned over and stroked Pat's head.

"So this is Pat the lad has been talking about, eh? Well, John, I'd take the dog up, and if the lad grows restless let him see him and stroke him. It will comfort him and will tend to divert his mind from the worry about the bonds. Cheer up, John, and hope for the best. Good night."

Mr. Giddings turned slowly to the door, called to Pat to follow, and the two quietly climbed the carpeted stairs.

"Now, you must be quiet, Pat," cautioned the nervous father. Pat understood and wagged his tail. Everywhere he smelled the hateful smell of the little black satchel. Mrs. Giddings, tired and red-eyed, would have sent him out, but her husband explained the doctor's suggestion.

In one corner was the low white bed. Buried deep in the covers lay Carl, his hair disheveled, his eyes sunken and dazed, his cheeks red with fever. One arm was thrown restlessly across the pillow. Pat took one long look and then, quietly as a shadow, he slipped over and before any one could stop him



The Great Man and One of His Grandchildren

Ex-President Roosevelt was devoted to his family. He is here seen with one of his grandchildren.

gently licked the hot, outstretched hand. "Lie down, Pat!" came the order, and he instantly obeyed.

Slowly the night wore away. Mrs. Giddings, worn out with many long nights of watching, fell asleep in spite of herself, but Mr. Giddings sat by the bedside, watching eagerly for any change. By his side sat Pat, also alert.

Several times Mr. Giddings spoke to him.

"We must not let him go, Pat," he said over and over again—"for with Jess 'somewhere in France' we need him, don't we?" Pat gently beat a tattoo on the floor with his tail and licked Mr. Giddings's hand.

It was nearly morning when Carl

suddenly sat up in bed, his boyish face scarlet with fever and his eyes wild.

"But the Eagles will win," he cried, "and I must go. Judge Barclay promised me. Why—oh, why do you keep me here? We must go over the top—bonds, thrift stamps, Germans, see them—see—see. . . ."

Mr. Giddings was quieting him as best he could while Pat stood looking mutely into his comrade's face, wondering why he did not speak to him.

"It's all right, my boy—it's all right. We'll take care of the Eagles, Pat and I. There now, quiet, that's it—there, there,

boy."

"Pat and you," said Carl, with a relaxed laugh. "Then Pat hasn't gone to France? Where is he? Pat, Pat!" he called.

Mr. Giddings seized the dog by the collar just in time to save a scene, for he was completely overjoyed at hearing his name, and bounded up on the bed with his forefeet, eager to lick his master's flushed face. Carl looked into the dog's eyes, reached out, and his hand patted him listlessly a time or two, and then he sank back, muttering unintelligibly about bonds, the Eagle Patrol, and his brother Jess.

But it seemed to Mr. Giddings that the boy rested better from that time until morning. Then, with the first warm rays of sunshine Carl opened his eyes again and gazed into his father's

face.

"Why, dad, you here?" he asked, weakly. "I've wanted you and Pat—Where is Pat? I've dreamed such awful things had happened to him."

Pat was instantly on his feet and doing his best to say good morning.

"Well, old fellow," Carl whispered, then closed his eyes again, but kept his extended hand on the dog's head, as if fearing he might go and leave him. Pat whined softly. Mr. Giddings's heart rejoiced, for there could be no doubt that the lad was better. He gently wakened Carl's mother and told her what had happened, and she fairly hugged Pat in her relief.

About nine Carl again opened his eyes, but this time his face was troubled and he thrashed about restlessly.

"What is it, my boy?" asked his father, softly. "Is something bothering you?"

"To-day is the bond parade, isn't it,

father?" he asked, faintly.

"No, son, it was yesterday." But a second later he was sorry he had told him, for like a flash the boy sat up and burst into a torrent of tears.

"Then I've missed it! Oh, daddy, I've missed the biggest thing in my life, and me patrol-leader! I suppose the

Eagles have won, too?"

Just then Mrs. Giddings came in with the morning paper, her face beaming, to read from the front page an item which told in glowing words how Pat's master, one of the best of all the Scout salesmen in the former drive, was seriously ill, and how the dog had, of his own accord, reported in the boy's place. The bond contest would run in another day, it said, because the Scouts' quota had been raised.

Together they all rejoiced and quite overwhelmed Pat with petting. Sud-

denly Carl had an inspiration.

"Mother, bring a paper and pencil and write for me. We'll beat the Eagles yet. I'll send a note to Judge Barclay and tell him I'm sick, but that he can send his subscription by Pat."

He dictated slowly and with effort:

"DEAR JUDGE BARCLAY:

"I'm so disappointed that I've been sick. I could not even march in the parade, but I remember you told me that if I needed more points to make the Wolves win you'd help me. The score is about a tie and the contest closes to-night. If you can buy more bonds so as to help Uncle Sam whip the Germans, I'll be a happy boy. You

can give your check to Pat and he will not fail you.

"Yours for Uncle Sam, CARL GIDDINGS."

Pat was told exactly what to do and started on his mission. Ten minutes later the 'phone bell rang and Judge Barclay reported that he was sending a check for one hundred fifty-dollar bonds. He hoped Carl was better, and concluded by saying he would like to buy Pat.

"Not for a million dollars!" laughed Carl, weakly. "Dad, you tell him."

The receiver had hardly been on the hook a minute when the Scout executive called, asked after Carl's health, then delivered a message that was worth all the pills in the doctor's ill-smelling case. Twenty-seven subscriptions for bonds had been 'phoned in to the Scout headquarters already that morning to Carl's credit as the result of the story in the paper.

"And Judge Barclay's bonds aren't

in yet," chuckled Carl.

The doctor came at ten and could hardly believe his eyes when he saw Carl. He demanded an explanation.

"John, it's wonderful!" he said. "I doubted last night if we'd save the boy."

"There is your explanation sitting on his haunches," smiled Mrs. Giddings.

"But, my lad, this is to be an exciting day," the doctor admonished Carl. "You aren't entirely out of danger yet, and you must be just as quiet as a mouse until four. Then you can talk some more. By the way, I'm going to buy a couple of five-hundred-dollar bonds myself, and I want to get them through Pat."

Carl smiled, and Pat rapped the floor

vigorously with his tail.

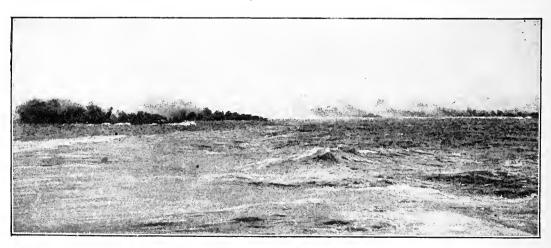
At five o'clock Mr. Giddings reported Carl's sales and added his own subscription. At six o'clock the executive called and said the Wolves had won by a good margin. The Eagles could not understand how it had happened, so they had just painted a crude sign and hung it on the bulletin-board above the Wolves' score. It read:

PAT DID IT.

A FRIEND IN NEED IS A FRIEND

INDEED

"There was never anything truer," said Carl, and he laid his hand affectionately on the dog's silky head.



A Smoke-screen



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